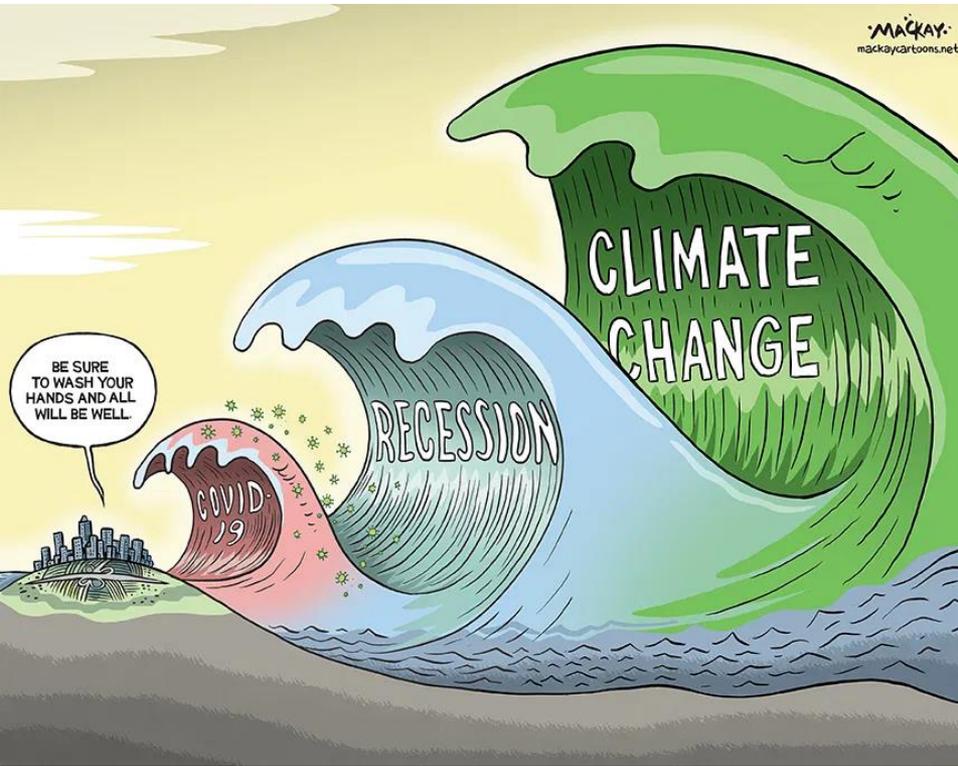




A sustainable forest-based bioeconomy

*Giovanni de Santi, European Commission, JRC
World Bioeconomy Forum 10 September 2020*

Action to match global challenges



“ *What started with a virus so small your eyes cannot see it, has become an economic crisis so big that you simply cannot miss it.*

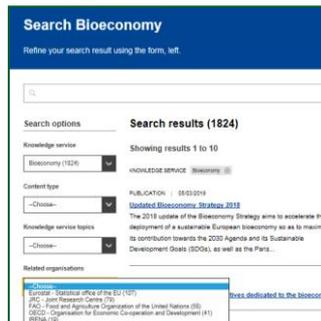
...
The European Green Deal and digitalization will boost jobs and growth, the resilience of our societies and the health of our environment. This is Europe's moment. Our willingness to act must live up to the challenges we are all facing.

EC President U. von der Leyen

EU Bioeconomy Strategy	Sustainable Development Goals
 <p>1. Ensuring food and nutrition security</p>	    
 <p>2. Managing natural resources sustainably</p>	    
 <p>3. Reducing dependence on non-renewable, unsustainable resources, (domestic or from abroad)</p>	         
 <p>4. Mitigating and adapting to climate change</p>	 
 <p>5. Strengthening European competitiveness and creating jobs</p>	     

Knowledge Centre for Bioeconomy: Ensuring scientific evidence feeds policies

Knowledge library with
3016 resources (publications,
datasets, news, events,...)



Commission-wide community of
practice

Online workspace with **66** users

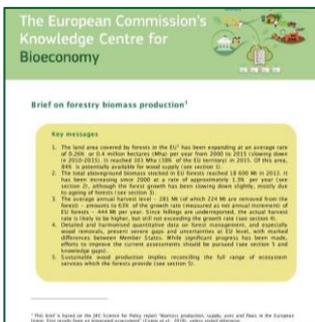
12 physical and virtual events engaging
400+ attendees



7 science for policy briefs

22 online interactive dashboards

Videos and infographics

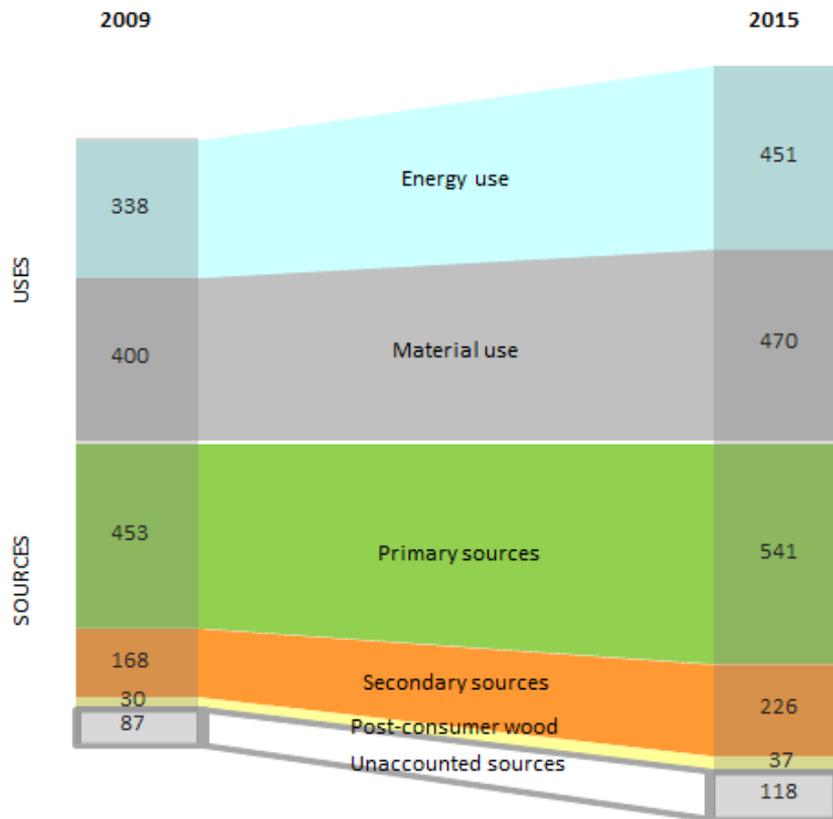


Data and knowledge to EU and
international policy-making

50+ references in the updated EU
Bioeconomy Strategy

Forest-based bioeconomy

Increasing use of woody biomass



Source:

JRC Biomass Study

Contribution to Commission's Knowledge Centre for Bioeconomy

<https://ec.europa.eu/knowledge4policy/publication/forestry-sankey>



JRC SCIENCE FOR POLICY REPORT

Biomass production, supply, uses and flows in the European Union

First results from an integrated assessment

Cernia A., Robert N., Jonsson R., Pilli R., Garcia-Cardado S., López-Lozano R., van der Velde M., Ronzon T., Quirle B., W. Barak, R. Tamouzas S., Fiore G., Araujo R., Hoefflner N., Marelli L., Giuntoli J.

2018



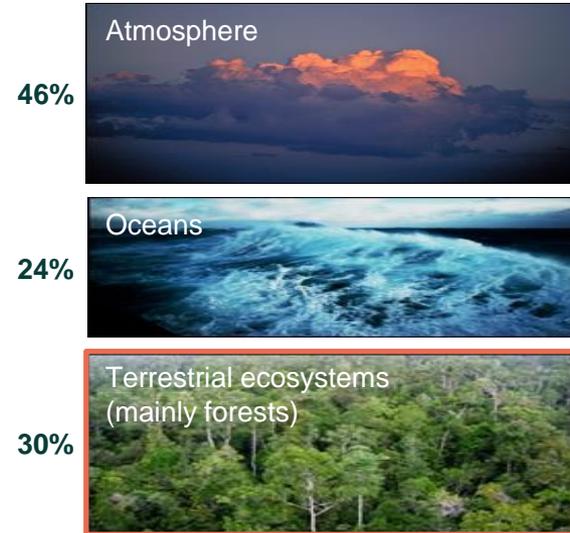
Knowledge Centre

EUR 28993 EN

Climate change

Forests are key to mitigating climate change

Energy, transport, etc.



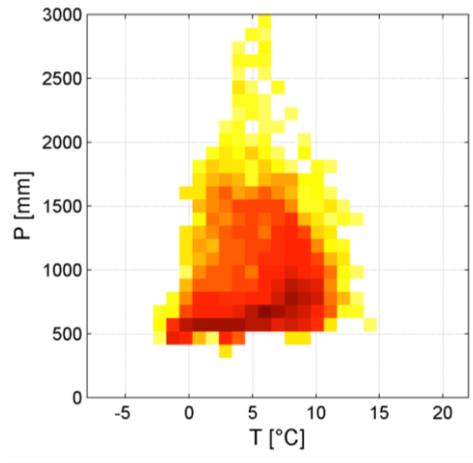
Land use, land-use change and forestry (LULUCF)

Climate change

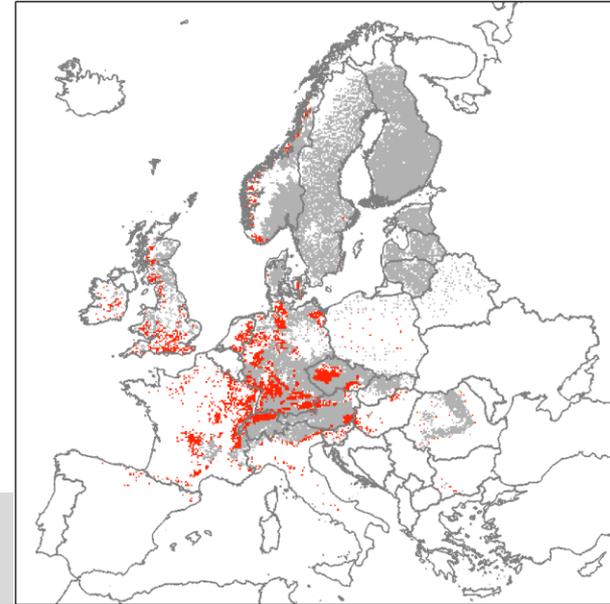
The distribution of key forest species will change



Norway spruce
(*Picea abies*)



Climate conditions where Norway spruce now grows (1951-1980)



Key tree species will disappear from a considerable fraction of their current range.

Adaptations strategies are needed to build climate resilient forests.



Wind storm Vaia
Italy, 27-30 October 2018



Bark beetle outbreak
Germany

Bienenfreund2018 / CC BY-SA



The effects of hot drought
California

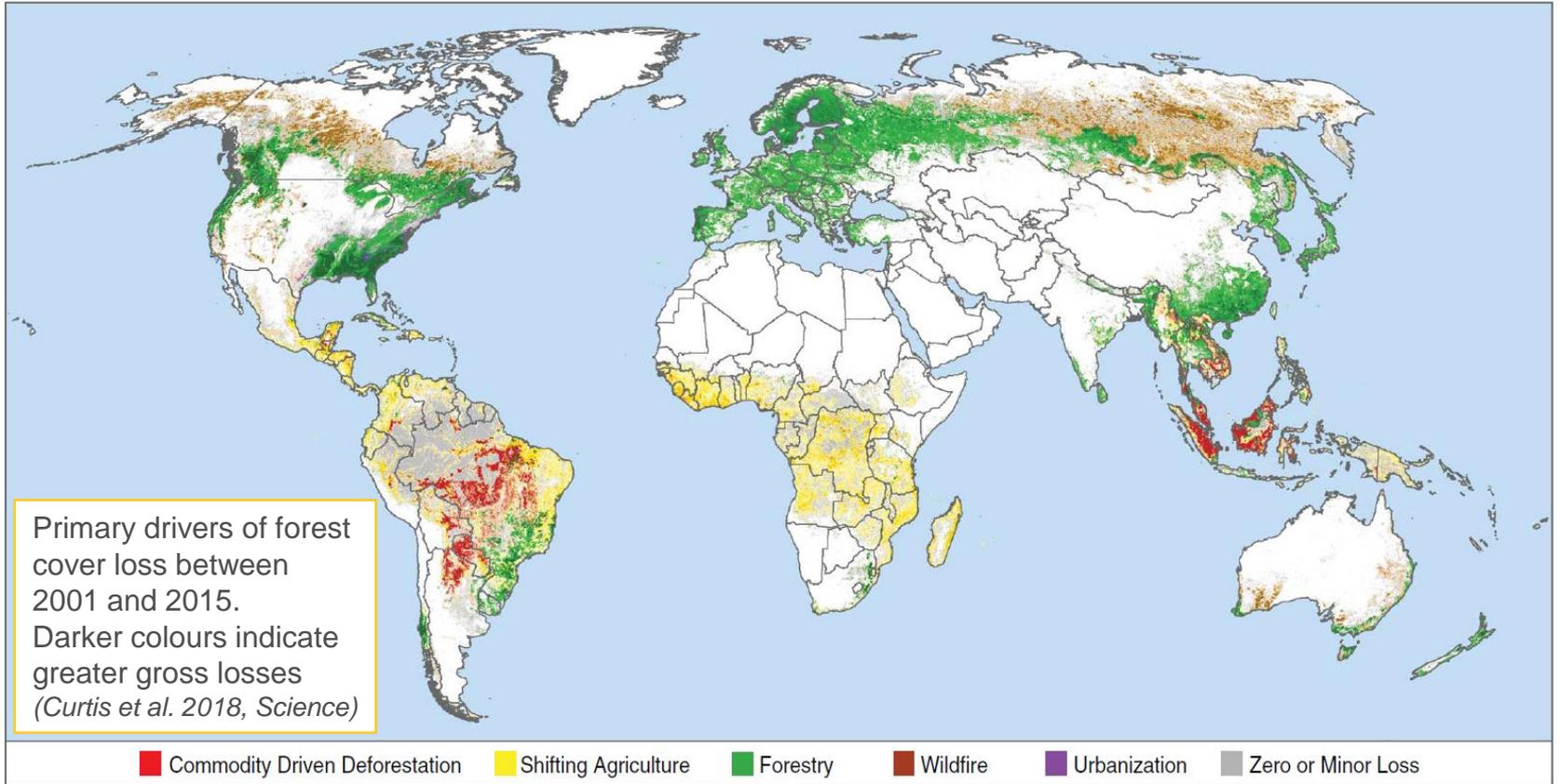
Nathan Stephenson, USGS.



Deforestation near Lieki,
DRC

Axel Fassio/CIFOR (CC BY-NC-ND 2.0)

Drivers of tree cover loss vary across the globe



Deforestation and Emerging Infectious Diseases

COVID-19 and nature are linked. So should be the recovery.



Half of the world's GDP is moderately or highly dependent on nature.



SCIENCE

Deforestation is leading to more infectious diseases in humans

As more and more forest is cleared around the world, scientists fear that the next deadly pandemic could emerge from what lives within them.

BY KATARINA ZIMMER

6 MINUTE READ



Agenda Platforms Reports Events Videos

Global Agenda COVID-19 Environment and Natural Resource Security

PUBLISHED NOVEMBER 22, 2019

Reducing the EU's consumption footprint on land



Stepping up EU Action to Protect and Restore the World's forests

COMMUNICATION

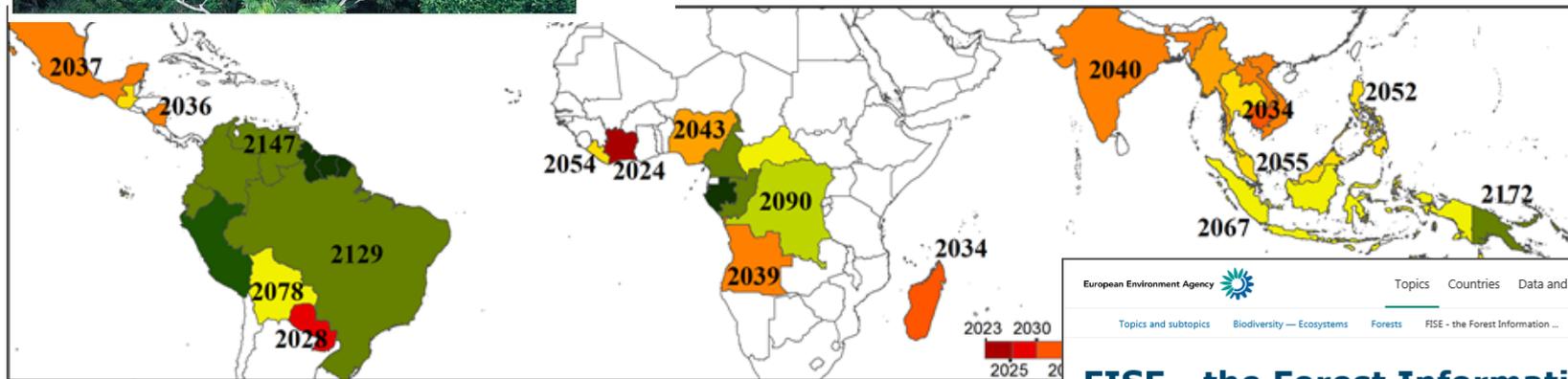
EU Communication (2019) on stepping up EU action to protect and restore the world's forests

First published on

23 July 2019



Action: "Build on the already existing monitoring tools, and **establish an EU Observatory on deforestation, forest degradation, changes in the world's forest cover, and associated drivers**. The objective of this is to facilitate access to information on supply chains for public entities, consumers and businesses"



Forecasted year of disappearance of undisturbed moist forests

European Environment Agency  Topics Countries Data and maps Indicators Publications

Topics and subtopics Biodiversity — Ecosystems Forests FISE - the Forest Information System for Europe

FISE - the Forest Information System for Europe

An EU Bioeconomy Monitoring System

Ensuring Food and Nutrition security



Managing natural resources sustainably

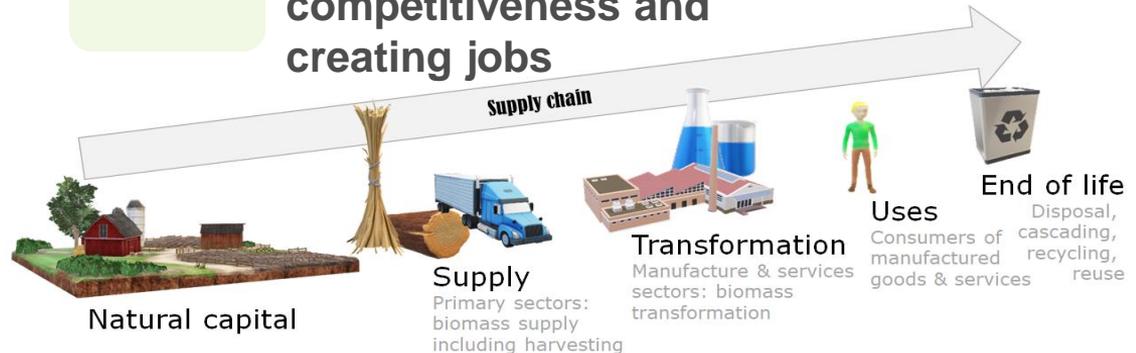
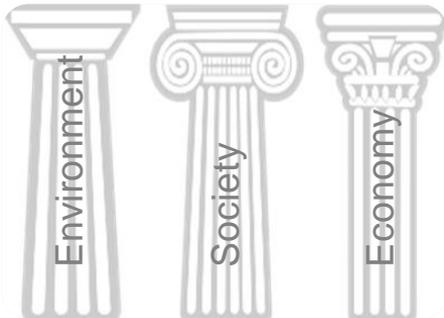


Mitigating and adapting to climate change

Reducing dependence on non-renewable, unsustainable resources



Strengthening European competitiveness and creating jobs



Take home messages

The time for bioeconomy is now !

The JRC runs the Knowledge Centre for Bioeconomy

The EU Bioeconomy Monitoring System should be launched later this year – covering all facets of sustainability

We need forward-thinking adaptation strategies for forests to fulfill their key role in the bioeconomy

The JRC is preparing to establish the EU Observatory on deforestation, forest degradation, changes in the world's forest cover, and associated drivers

