



**State Forests**  
FOR FOREST, FOR PEOPLE

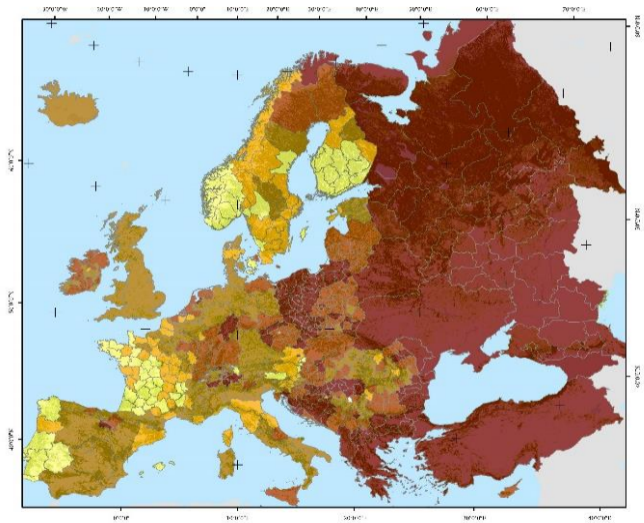


# Possible Economic Impacts of recent EU forest-related Policies II

**Damian Zieliński**

**Copenhagen, 13th October 2022**

# PUBLIC FOREST OWNERSHIP MAP OF EUROPE



Source: EFI



FOREST MAP OF EUROPE

Recommended citation for the forest ownership map of Europe:  
 Janda, P., De Looze, A., Vydrová, P., Čížková, L., Křiváček, M., and Štepec, K. (2011). Mapping the distribution of forest ownership in Europe. EFI Technical Report 09/11.

#### Acronyms and Abbreviations

Forest ownership data: Čížková, L. (2008). *Mapa a tabulka rozložení lesů v České republice*. Praha: Ústřední úřad zemědělského a potravinářského inspektorátu, odbor lesnický.

#### Public ownership

Information for the public ownership was obtained from the public ownership data of the countries or regions provided by the respective authorities (see Table 1).

#### References

FAO (2005). *Global Forest Resources Assessment 2005: Main Report*. Rome and Earthwatch Institute. Report No. 100, 272p. Available at: <http://www.fao.org/docrep/010/097/097000.htm>.  
 Čížková, L. (2008). *Mapa a tabulka rozložení lesů v České republice*. Praha: Ústřední úřad zemědělského a potravinářského inspektorátu, odbor lesnický.

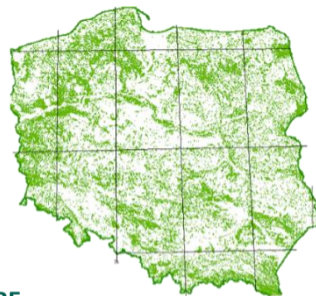
#### Legend of forest land and public ownership (%)



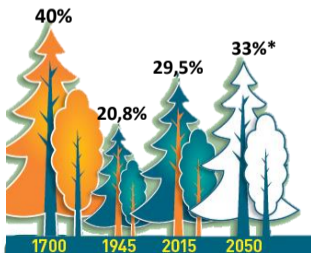
Where is  
 forestry  
 headed?

## The significance of the Polish forests

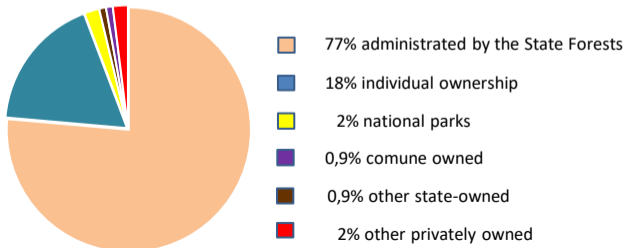
- ❑ Forest area in Poland: 9,4 mln ha
- ❑ Under the management of the SF: 7,4 mln ha
- ❑ Forest cover: ca 30% of the total land area
- ❑ Growing stock of the Polish forests 269 m<sup>3</sup>/ha
- ❑ Biomass of Polish forests contains 822 milion tonnes of carbon
- ❑ **Timber harvesting volume ca. 40 mln m<sup>3</sup>**



### FOREST COVER



### OWNERSHIP STRUCTURE





Directorate General  
of the State Forests

Regional  
Directorates  
(17)

Forest Districts  
(430)

**The State Forests units operate on nationwide, regional and local levels. We employ over 26 000 people and are the biggest organization of this kind in the European Union.**

**Due to a special financial mechanism we are economically independent and do not rely on taxpayers support.**

# Forest monitoring

## National Forest Inventory

- ✓ forests of all properties, all types and age classes,
- ✓ about **28 thousands** of permanent sample plots,
- ✓ one cycle - five years (from 2005) ,
- ✓ annually 20% of total samples in the entire country.

## Stand and district level inventory

comprehensive information system based on numeric maps

- ✓ forest site and stand inventory,
- ✓ periodic forest inventory (10 year cycle),
- ✓ online registry on all activities on stand level - more than **2 million records**.

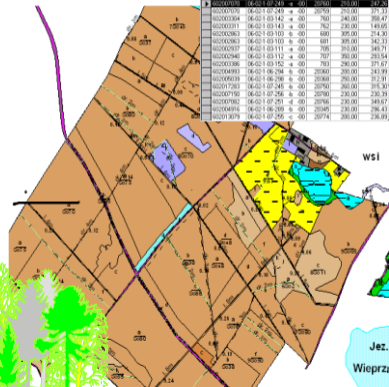
## Monitoring and research plot networks

- Various networks focused at *inter alia*:
- expansion factors refinement,
  - forest condition monitoring,
  - forest endangerment monitoring.

| Wielki region         |              |                  |            |   |          |
|-----------------------|--------------|------------------|------------|---|----------|
| Nazwa obszaru leśnego |              |                  |            |   |          |
| Id                    | Id kontrolny | Linia obserwacji | a          | b |          |
| 1                     | 0            | 0                | 57 204 440 | 0 | 0,30746  |
| 2                     | 0            | 0                | 1 305 000  | 0 | 0,00140  |
| 3                     | 303          | 64 630 960       |            |   | 0,032406 |
| 4                     | 207          | 102 196 000      |            |   | 0,036251 |

| Id woj.   | Id pow.     | Id obsz. leśn. | Id pow. (obsz.) | a      | b      | f |
|-----------|-------------|----------------|-----------------|--------|--------|---|
| 602000005 | 06-02-00249 | -00            | 20700           | 250,00 | 242,26 |   |
| 602000005 | 06-02-00249 | -00            | 20700           | 250,00 | 375,33 |   |
| 602000004 | 06-02-00142 | -00            | 700             | 240,00 | 399,47 |   |
| 602000010 | 06-02-00143 | -00            | 762             | 230,00 | 149,05 |   |
| 602000963 | 06-02-00103 | 0-00           | 680             | 305,00 | 214,30 |   |
| 602000963 | 06-02-00103 | 0-00           | 681             | 305,00 | 342,33 |   |
| 602000937 | 06-02-00111 | -00            | 705             | 305,00 | 345,71 |   |
| 602000940 | 06-02-00112 | -00            | 707             | 350,00 | 293,54 |   |
| 602000396 | 06-02-00152 | -00            | 783             | 290,00 | 371,67 |   |
| 602000893 | 06-02-00629 | -00            | 20300           | 250,00 | 243,99 |   |
| 602000609 | 06-02-00629 | -00            | 30300           | 250,00 | 312,91 |   |
| 602017261 | 06-02-00345 | 0-00           | 30500           | 250,00 | 315,30 |   |
| 602007190 | 06-02-00256 | 0-00           | 20700           | 230,00 | 230,29 |   |
| 602007862 | 06-02-00251 | -00            | 20700           | 230,00 | 249,67 |   |
| 602004914 | 06-02-00629 | 0-00           | 20305           | 230,00 | 296,43 |   |
| 602013079 | 06-02-00258 | -00            | 20774           | 200,00 | 238,09 |   |





## We protect nature

- ✓ Natura 2000: **38%** of SF area
- ✓ Nature reserves: **2 %** of SF area
- ✓ Protection zones for chosen species:  
**2%** of SF area
- ✓ 11 million euro for a complex European bison protection project in SF (2017-2020)
- ✓ **44 million euro** support from SF for national parks in the years 2016-2020



Greatest number of nature protection forms



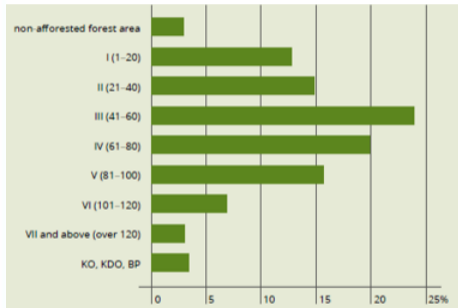
Reintroduction of endangered species



Support for national parks

# MODERN SILVICULTURE

## AGE STRUCTURE



- ❑ The average forest age is over **60 years**
- ❑ Stands representing **age classes III and IV** prevail in the forest structure and cover **24.9%** and **19.4%** of the forest area

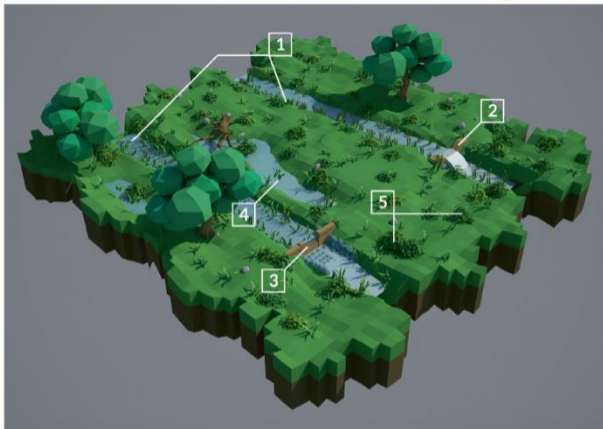
- ❑ We plant **500 mln trees** per year



- ❑ We are enhancing the importance of natural renewals – **their share in the last six years is 13,8%**.
- ❑ The nurseries produce annually **759 million of seedlings** (53 million seedlings are being produced in container nurseries)

## Small retention in lowland & mountain areas 2016-2022

- ✓ Renaturalization of wetlands, streams, bank-side reservoirs
- ✓ Construction, reconstruction or restoration of 2300 small retention reservoirs and other hydrotechnical facilities
- ✓ Storage of additional 2.5 million m<sup>3</sup> of flood or rain water
- ✓ The total cost of 120 million USD from the



### RENATURALISATION OF WETLANDS

This is a process of restoring drained (via a damaged drainage system) wetlands to a good condition, through the construction of small water facilities on old canals and ditches **1**. Barrages built in artificial watercourses **2** impound water to the required level, and thanks to water gates **3** it is possible to regulate and maintain a specified (often variable in time) water level in the ditch. Thanks to these measures, soil retention increases, the water level in a wetland rises **4**, abundant vegetation, characteristic of this habitat, grows **5**, and water and marsh birds thrive.



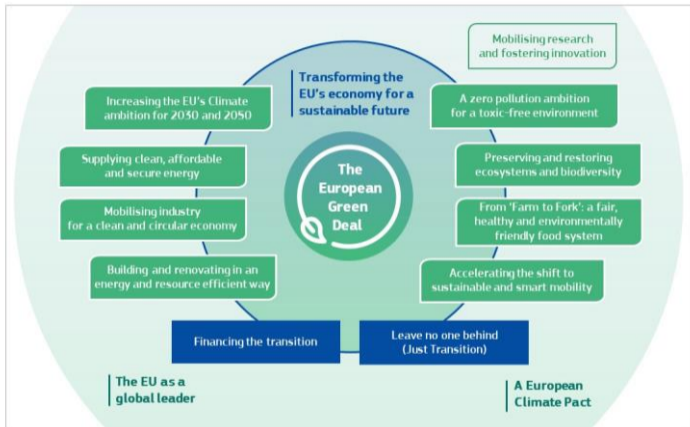
## Climate Change is an issue!

- ✓ “Effective and progressive response to the urgent threat of climate change”
- ✓ Global temperature rise this century “well below” 2 °C above pre-industrial levels (+ efforts for 1.5 °C).
- ✓ “Achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century”



Paris Agreement (2016)

IT'S ALL  
**ALREADY**  
HERE



“It has been and will be a commitment by the Commission and my personal commitment to make the Green Deal a fair deal. Either the Green Deal will be fair, or there will be no Deal. „

Virginijus Sinkevičius



## Challenges faced by European forests and forestry

- ✓ Socio-political changes that are shaping the public's perception of forests and forestry
- ✓ the growing number of policies is affecting the complex and fragmented forest policy environment
- ✓ advancing climate change and accompanying threats to forest sustainability

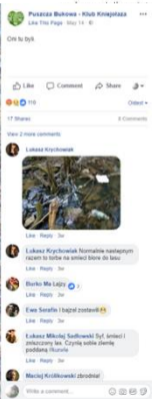
## Current discussion trends

- ✓ Increasing contestation of the principles of sustainable forest management,
- ✓ introducing new terminology:  
close to nature forestry
- ✓ questioning the validity of the idea of multifunctionality of forests, and thus proposing the separation of natural and productive functions, and in selected areas the cessation of any forest use.

Growing expectations for forests → ← Increasing threats

# Forestry in the age of public scrutiny

5 February 2019



Trees cover 182 million hectares of the EU. That's six times the size of Italy. Yet as this report shows, European Union (EU) forests are under threat, and rapid and committed action is required to save them. We all - citizens, policy-

organisations and political leaders - have a duty to protect our forests, and to make sure they are managed in a way which respects biodiversity, indigenous peoples, and natural resource limits.

Conifer forests in the Czech Republic fall to clear-cutting, biomass power plants threaten to replace old-growth forests, old-growth forests are being destroyed in Poland and Romania, conifer plantations swamp natural forests, and illegal logging continues in Sweden... These are just a handful of the forests in danger.

Urgent action to protect forests globally, including financial aid, innovative trade work such as the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan and commitments to end EU trade deals that cause agricultural deforestation. But to meet climate targets and improve the health of our communities, we must protect forests the world over.



# EU BIODIVERSITY STRATEGY

*Bringing nature back into our lives*

- ❑ Strategy sets targets of legally protecting a minimum of 30% of the EU land area and 30% of the EU's sea area, to **strictly protect at least one third of the EU's protected areas, including all remaining EU primary and old-growth forests**, and to effectively manage and appropriately monitor all protected areas by 2030.



## Consequences of implementing the EU's biodiversity strategy

- ✓ Impact on carbon sequestration opportunities
- ✓ Impact on forest communities
- ✓ Risk of large-scale forest dieback
- ✓ Impact on timber harvesting
- ✓ Impact on forestry and forests in non-EU countries

**Deloitte.**



Achieving the desired goal would require strict protection of nearly 1/3 of the EU's forest area (**10% is 42,676,420 hectares**).

Reliable estimates indicate that achieving this goal would result in a decline in the EU's raw timber production by **more than 40%, or about 244 million m<sup>3</sup>**

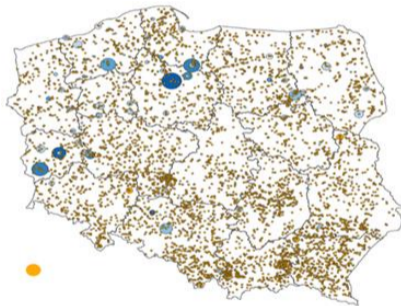


## Consequences of timber imports

- ✓ Imports of wood raw material from outside the EU
- ✓ Substitution of wood by other raw materials - plastic, glass, metal, rubber, concrete, petroleum products, etc.
- ✓ Significant increase in CO<sub>2</sub> emissions as a result of deforestation and as a result of shipping and lengthening the transportation route of raw material in Europe
- ✓ Forest biodiversity outside the European Union will also be threatened

## Consequences in Poland

- ✓ Decrease in timber harvesting
- ✓ Possible reduction of more than 200,000 people employed in the timber industry
- ✓ A decrease in the share of wood industry employees in total industry from 12.5% to 6%
- ✓ Reduction or liquidation of production of 90% of companies located in rural areas-92% of wood processing companies employ less than 10 people.







# Activation of forest dieback processes

- ✓ loss of ability to sustain biodiversity
- ✓ dead forests will become an emitter of CO<sub>2</sub>
- ✓ loss of opportunities to mitigate the effects of climate change - including reduced water retention, mitigation of daily temperature amplitude, loss of beneficial effects on air quality, activation of erosion processes.

## EU plan to restore natural resources by 2030.

- ✓ Politically unrealistic goal of restoring 20% of land and sea areas
- ✓ No definition of "satisfactory levels" of ecosystems
- ✓ Unclear links to Natura 2000 and extension of these provisions beyond the network
- ✓ Lack of identified sources of funding



## Conclusions

- ✓ Forests have a central role in Climate Change mitigation but adaptation, prevention and preparedness are a key issues!
- ✓ Only Sustainable Forest Management (SFM) can bring long-term climate benefits from healthy and resilient forests
- ✓ EU policies need to be coherent and based on SFM Principles

**EU forests are a growing resource but must be resilient**



**State Forests**  
FOR FOREST, FOR PEOPLE



# Thank you!

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