

# European experience in using CSF approach

Awareness raising workshop – 2 June 2021

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# The Netherlands: early adopter of CSF

Forests cover only 11% of land surface (370.000 ha)

Still a great need for:

Climate change mitigation

Climate change adaptation



# Dutch Climate Agreement



- All sectors included
- Ambition for forest and nature sector
- Aim: 0.8 Mton CO<sub>2</sub>/yr additionally in 2030

Through afforestation and improved management

# Forest management



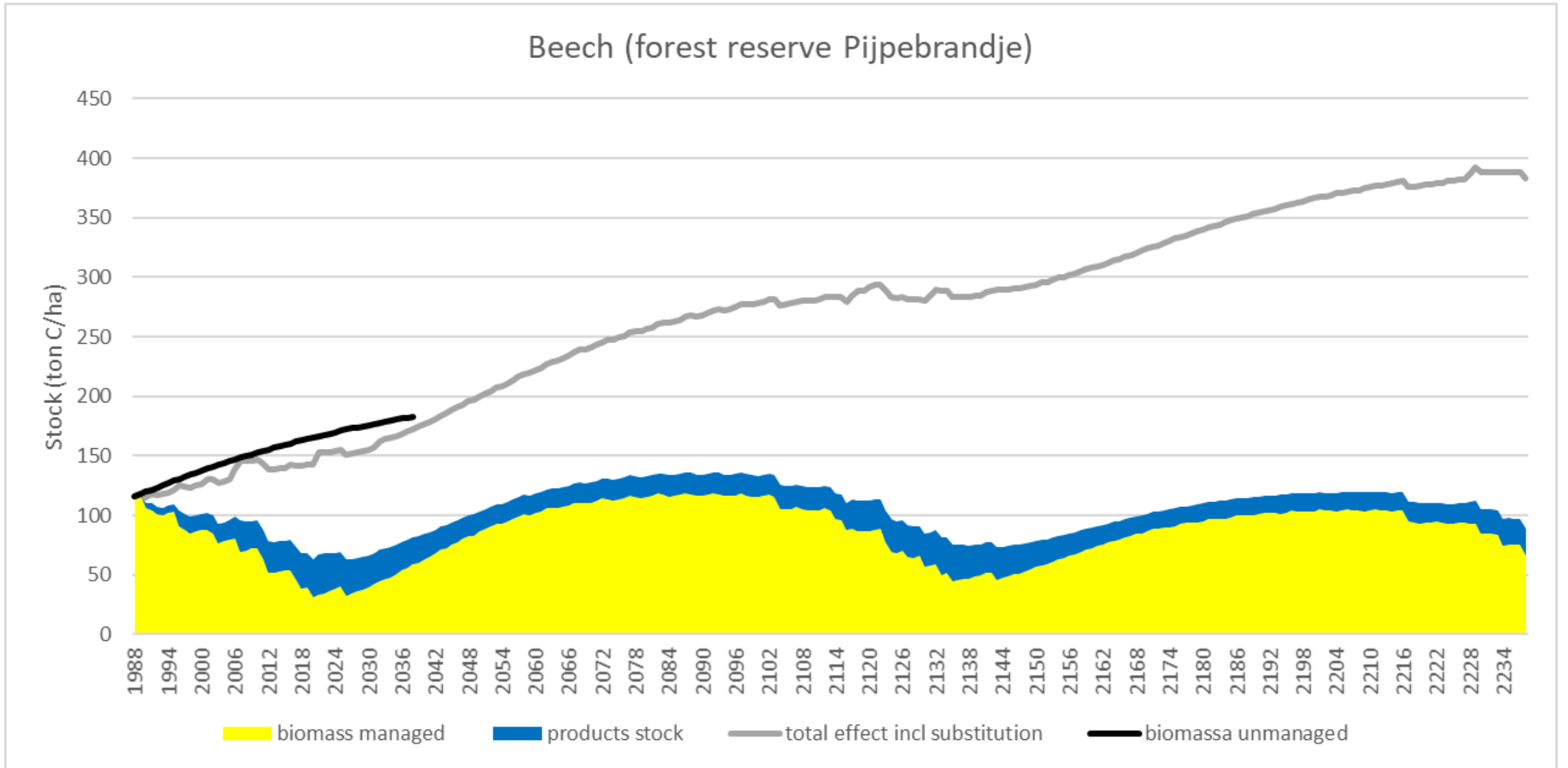
- Revitalising old pine and spruce forests
- Mixed species
- Selected provenances
- Monitoring after  $\sim 2$  years

# Forest management



- Forest reserve research
- Carbon sequestration
- To manage or not to manage?

# Forest management



# Afforestation

- Combination of functions work best
- Agroforestry popular
- 'Normal' afforestation hard due to costs and legislation



# Situation in Europe



Harz. Foto: Louis König



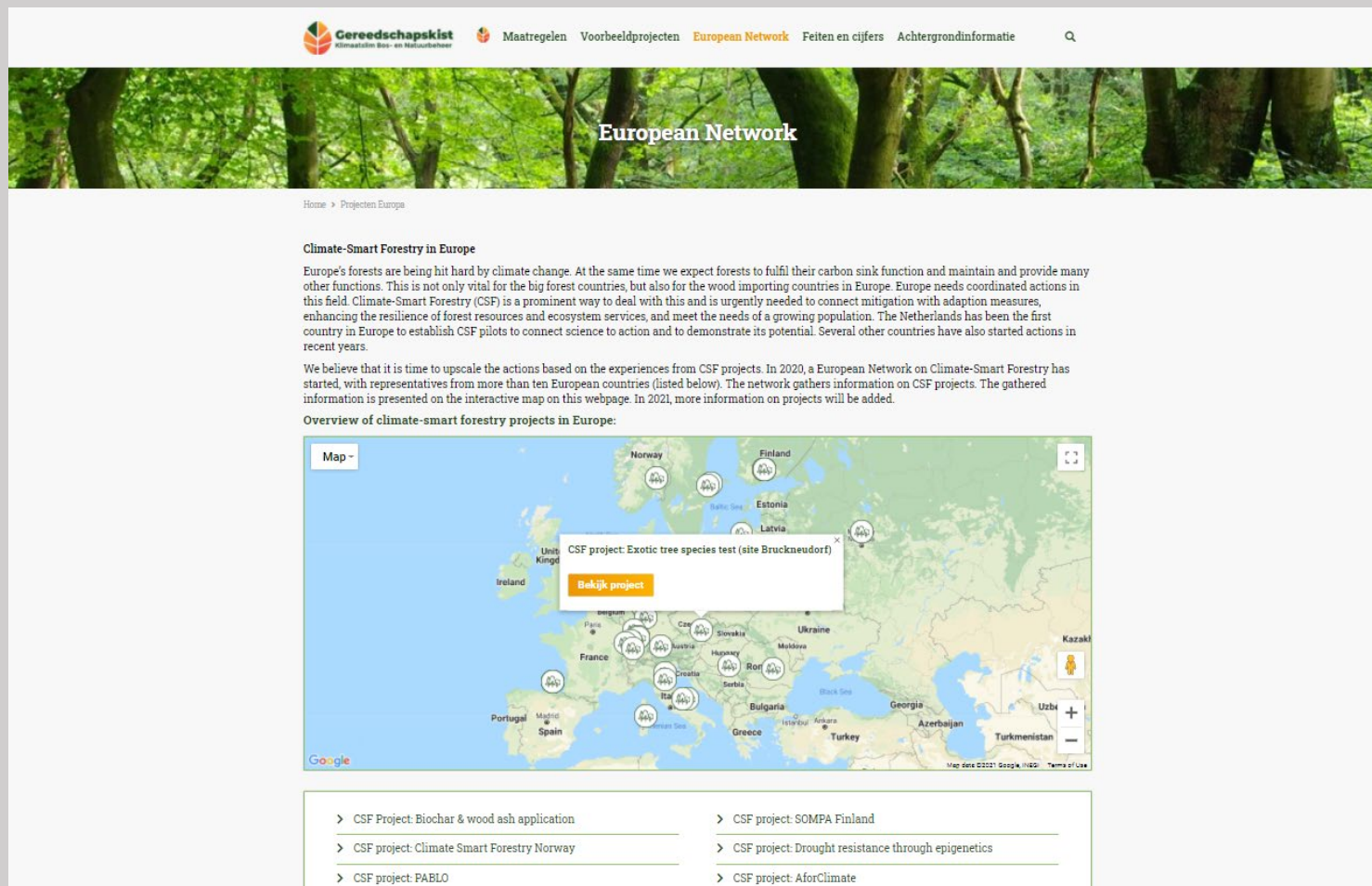
- 200 million m<sup>3</sup> dead spruce



# Climate-Smart Forestry Network

- Connect researchers and institutes working on CSF
- Collect and show example projects

[www.climatesmartforestry.eu](http://www.climatesmartforestry.eu)



The screenshot shows the website's header with the logo 'Gereedchapskist' and navigation links: 'Maatregelen', 'Voorbeeldprojecten', 'European Network', 'Feiten en cijfers', and 'Achtergrondinformatie'. A search icon is also present. Below the header is a large image of a forest with the text 'European Network' overlaid. The main content area includes a breadcrumb trail 'Home > Projecten Europa', a section titled 'Climate-Smart Forestry in Europe', and two paragraphs of text explaining the network's purpose and goals. Below the text is an interactive map of Europe showing various CSF projects marked with tree icons. A pop-up window for a project in Austria is visible, with a 'Bekijk project' button. At the bottom, there is a list of project links:

- > CSF Project: Biochar & wood ash application
- > CSF project: Climate Smart Forestry Norway
- > CSF project: PABLO
- > CSF project: SOMPA Finland
- > CSF project: Drought resistance through epigenetics
- > CSF project: AforClimate

# Irrigation experiment Pfywald



- Better understanding of effects of drought periods on forests
- Do trees have an ecological memory?

# Adapting beech forests to climate change



- 180 experimental plots in Appenine mountains (Italy)
- Silvicultural interventions aiming for higher wood production and better regeneration
- Monitoring system over multiple years

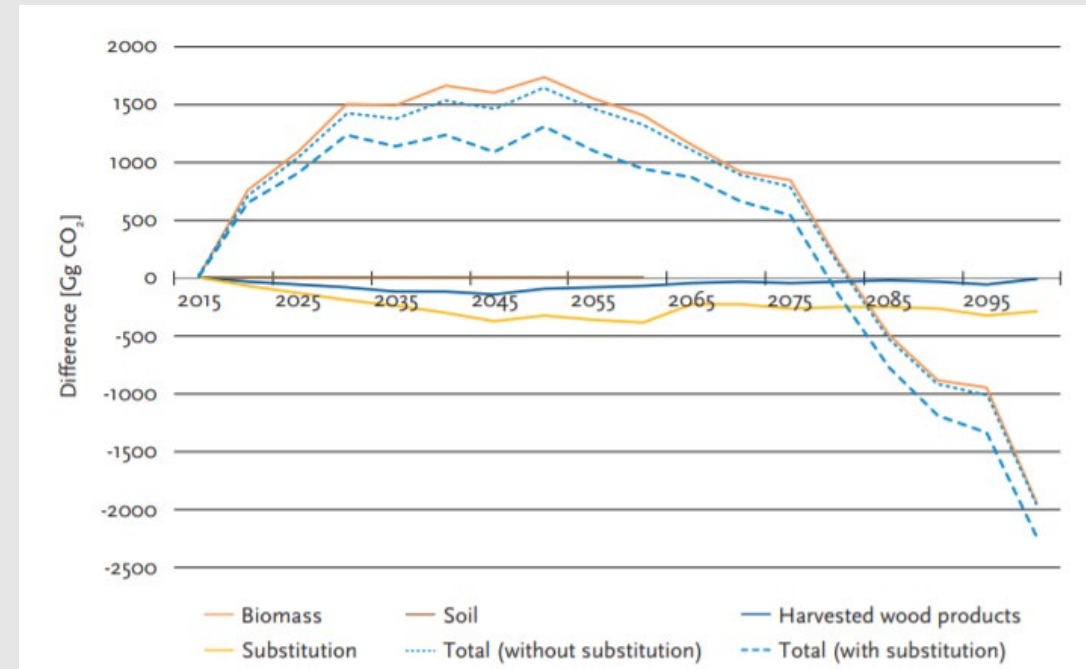
# Case study: impact of CSF in three European regions

- Spain, Ireland, Czech Republic
- Addressing the main challenges
- Similar approach as in RUFORCLIM



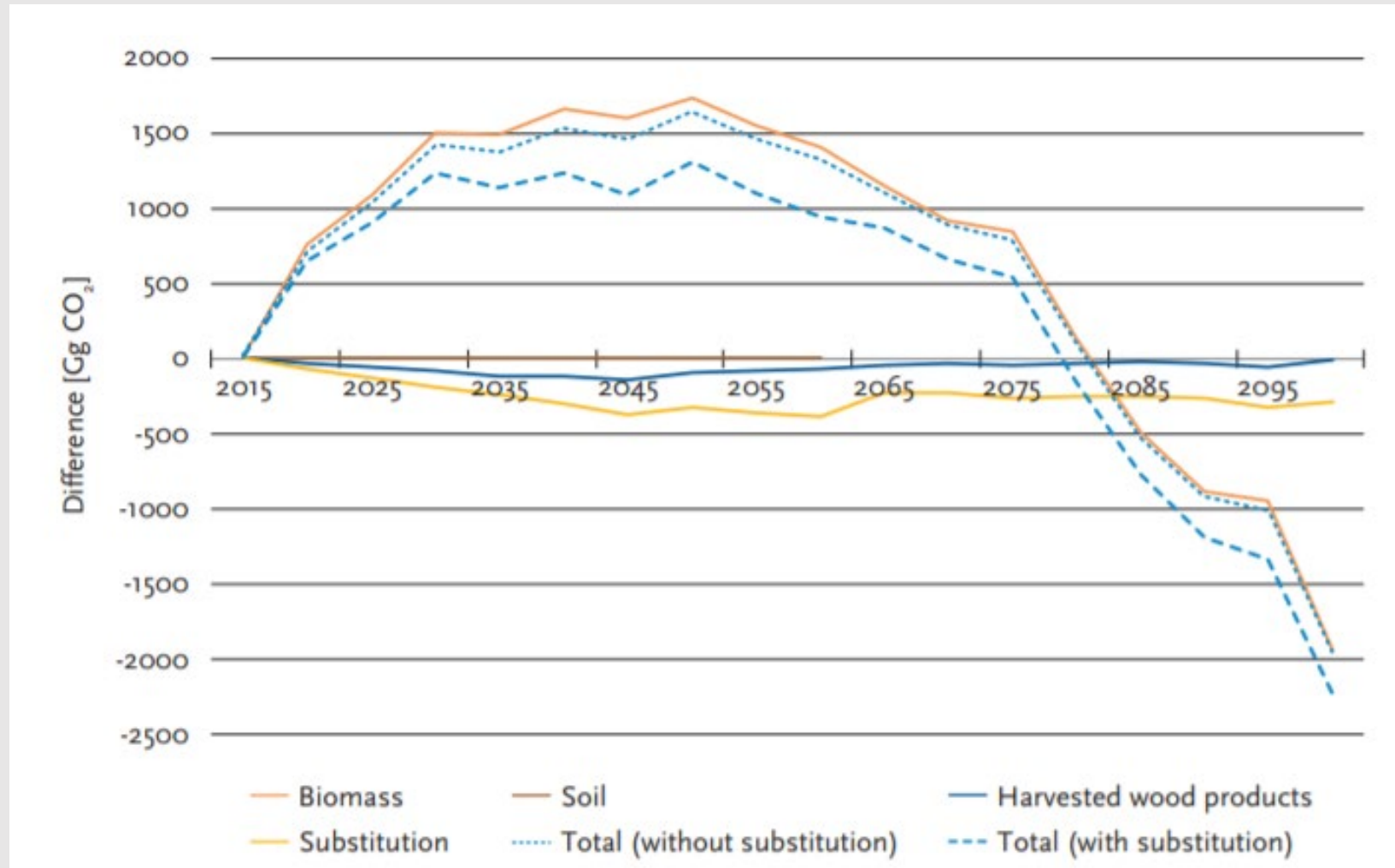
*Nabuurs et al. (2018). Climate-smart Forestry: mitigation impacts in three European regions. From Science to Policy 6, European Forest Institute*

# Case study: impact of CSF in Czech Republic



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# Case study: impact of CSF in Czech Republic



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# Take home messages

- Almost all European countries are already testing climate smart forestry
- Both adaptation and mitigation are important (adapting forest to multiple stress & measures to improve carbon balance). *Note that a carbon sink cannot always be maintained.*
- Wide variety of measures (from strict reserves to intensively managed plantations are possible)
- Adapt to local circumstances and other demands on forest
- Start a chain of: research – experiment – pilots – implementation & outreach
- Governance and policies (clear targets for forest sector) are a prerequisite
- Gathered experiences available on [www.climatesmartforestry.eu](http://www.climatesmartforestry.eu)



Thank you!

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