Sustainable and multifunctional use of forest biomass

Madrid, September 2022

Project acronym: **SustMultBiomass**

Tord Snäll (SLU, Sweden)

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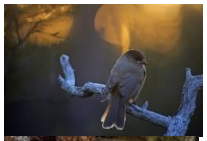
SustMultBiomass partners

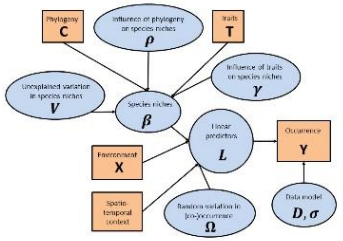
- Swedish University of Agricultural Sciences (SLU, coordinator)
- Finnish Environment Institute (SYKE)
- Norwegian University of Life Sciences (NINA)
- Norwegian Institute for Nature Research

- Total project budget: 1 156 986 €

- Project period: 2022-03-01 - 2025-02-28

Background





EU or global socioeconomic and land-use scenarios

downscale

national or landscape forestry scenarios

model building using systematic field data or Citizen Science Data

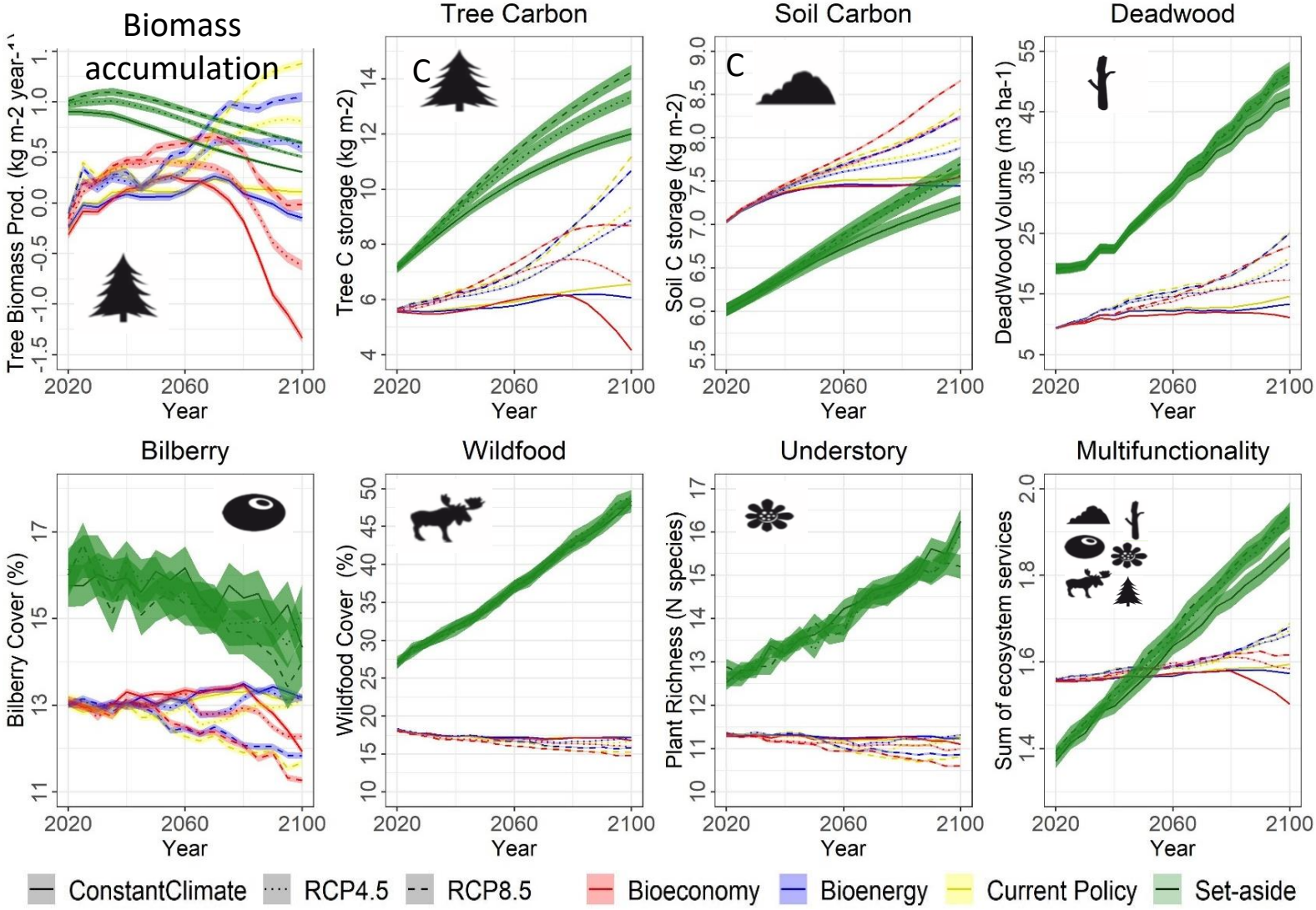
climate

human well-being

(meta)populations, communities

ecosystem services

Climte mitigation scenarios given alternative future climates



Mazziotta et al. (GCB, 2022)

Rebuilding boreal green infrastructure

Production land
(incl. voluntary set-asides)

Reserves

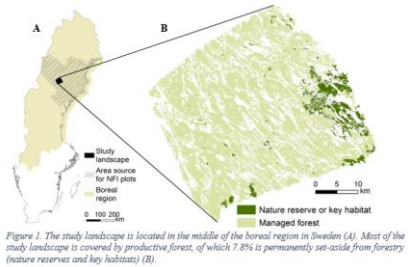
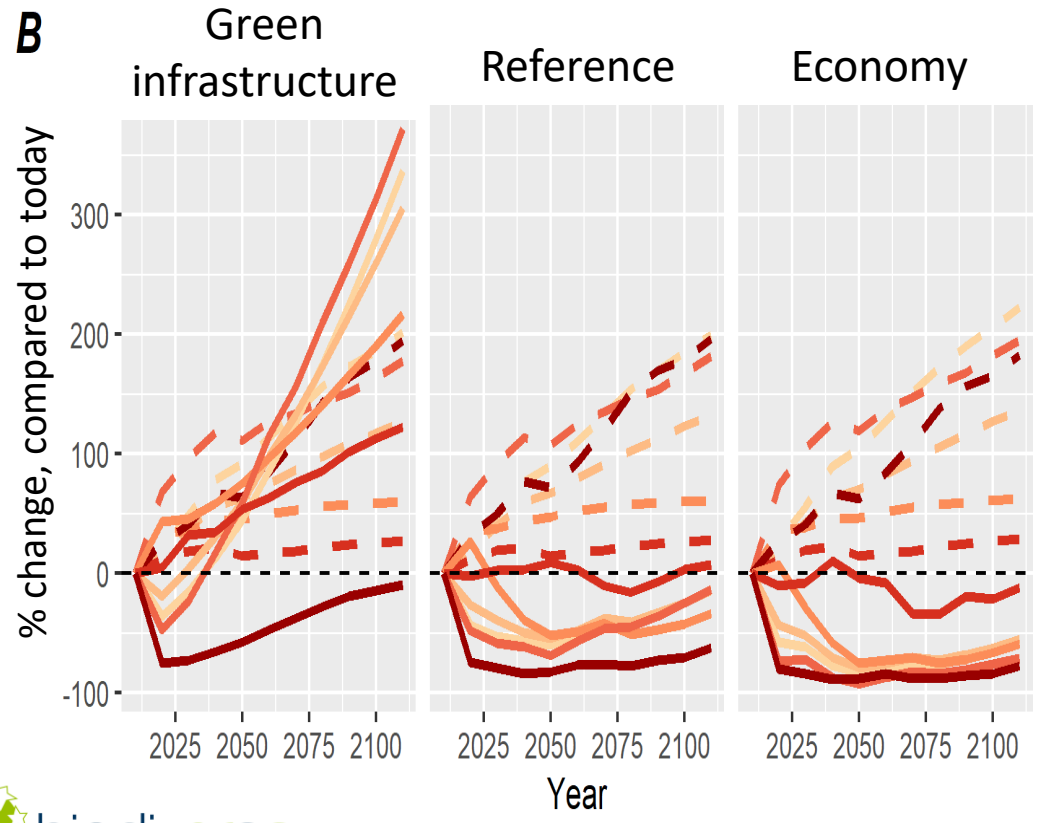


Figure 1. The study landscape is located in the middle of the boreal region in Sweden (A). Most of the study landscape is covered by productive forest, of which 7.8% is permanently set-aside from forestry (nature reserves and key habitats) (B).




A. lapponica


F. rosea


P. ferrugineof.


P. nigrolimitatus

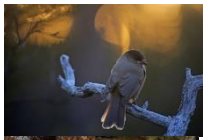

P. viticola

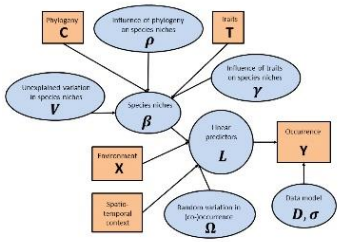

P. centrifuga

biodiversa

Moor et al. (JApplEcol, 2022)

SustMultBiomass tasks





EU or global socioeconomic and land-use scenarios

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LCA

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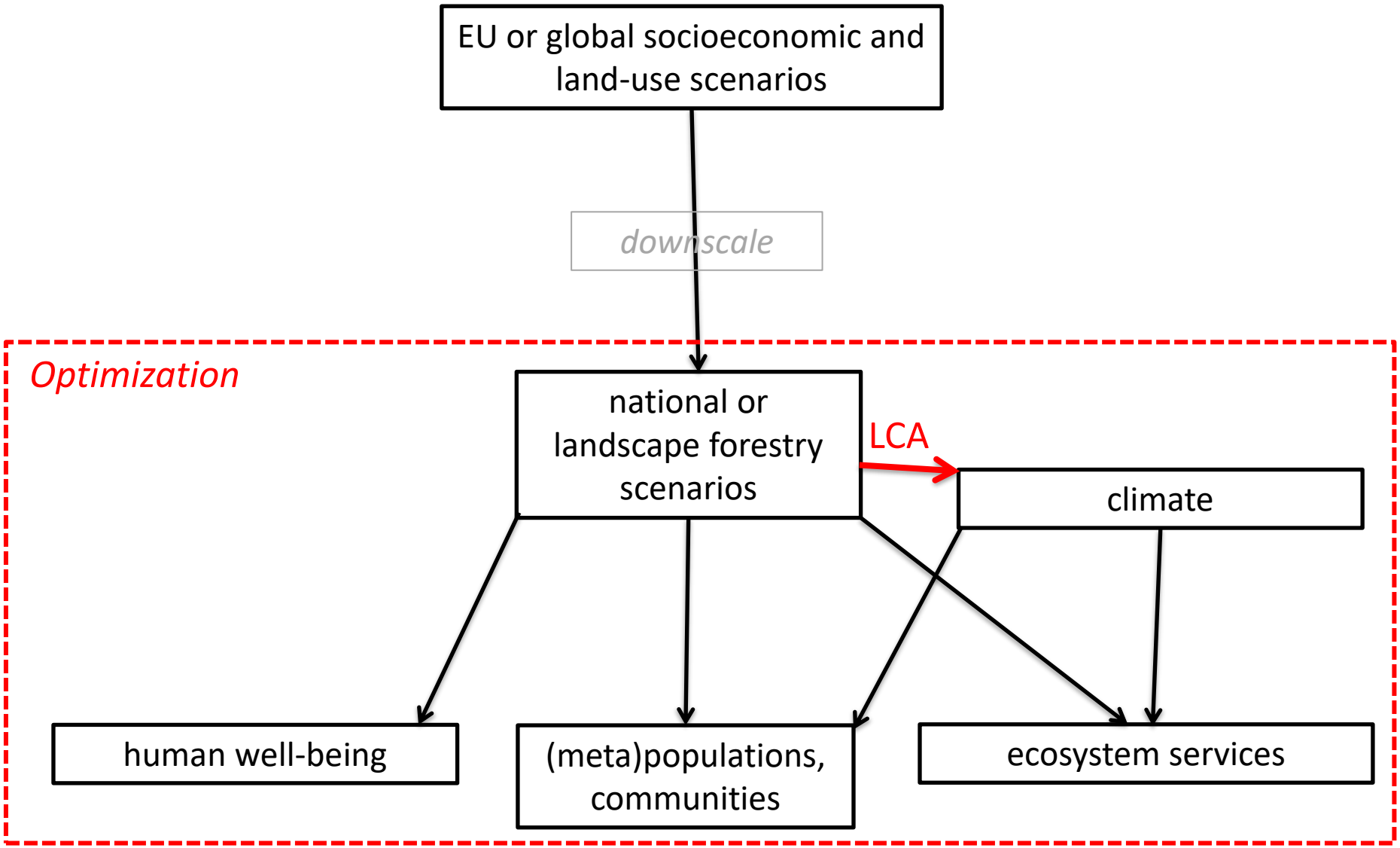
SustMultBiomass tasks



SustMultBiomass objectives

- Conduct sensitivity analysis to identify which Life-Cycle Assessment (LCA) parameters are most important in affecting climate (sensitivity analysis)
- Add climate LCA to forest use optimization tool
- Identify tradeoffs and synergies for reaching targets on
  climate change mitigation (based on LCA),
  wood harvest, incl. (long-lived) products, pulp, bioenergy,
  non-woody ecosystem services,
  biodiversity
- Focus on the coming 30 and 100 years
- Three climate scenarios
- Identify "optimal" pathways of national forest biomass use that reach societal targets on these different uses, i.e. pathways that are sustainable and multifunctional

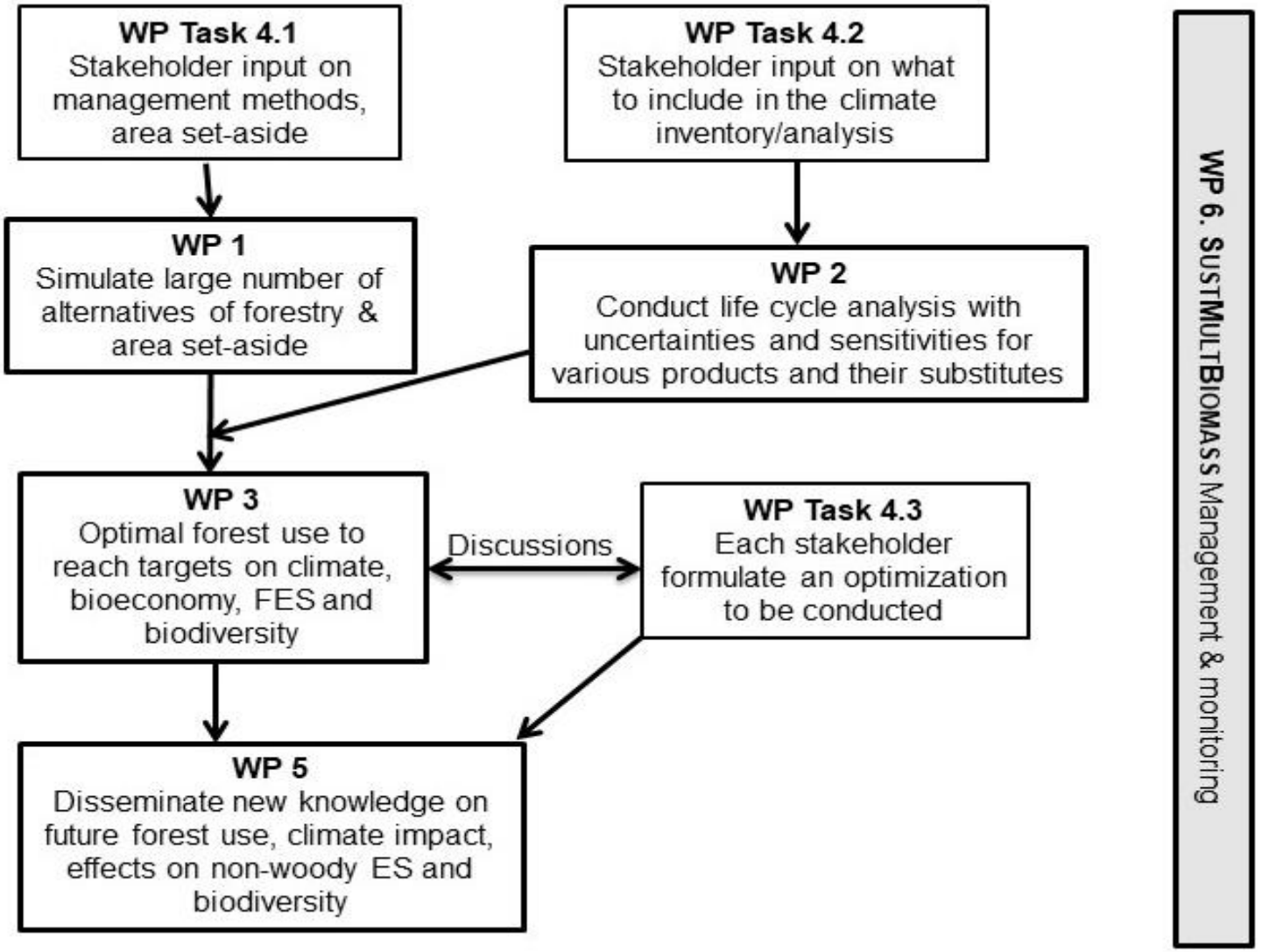
SustMultBiomass objectives, continued

- Investigate how Nordic stakeholders' preferences regarding forest (biomass) use and forest management may affect responses described.

  - climate change mitigation (based on LCA),
  - wood harvest, incl. (long-lived) products, pulp, bioenergy,
  - non-woody ecosystem services,
  - biodiversity

- Together with Nordic stakeholders, write a synthesis report on project topic

SustMultBiomass overview



Thank you!

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ForestValue

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