

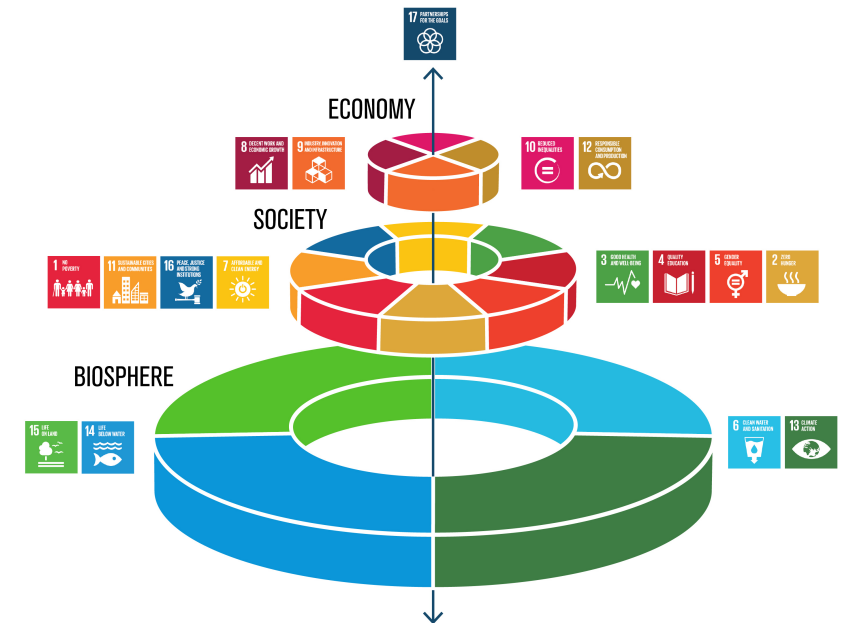
Climate smart forestry

Climate smart Sveaskog

Sveaskog is Sweden's largest forest owner and sells sawlogs, pulpwood and biofuel. Sveaskog also works with land transactions and develops the forest as a venue for hunting, fishing and other nature-based experiences. <https://www.sveaskog.se/en/>

Climate smart forestry

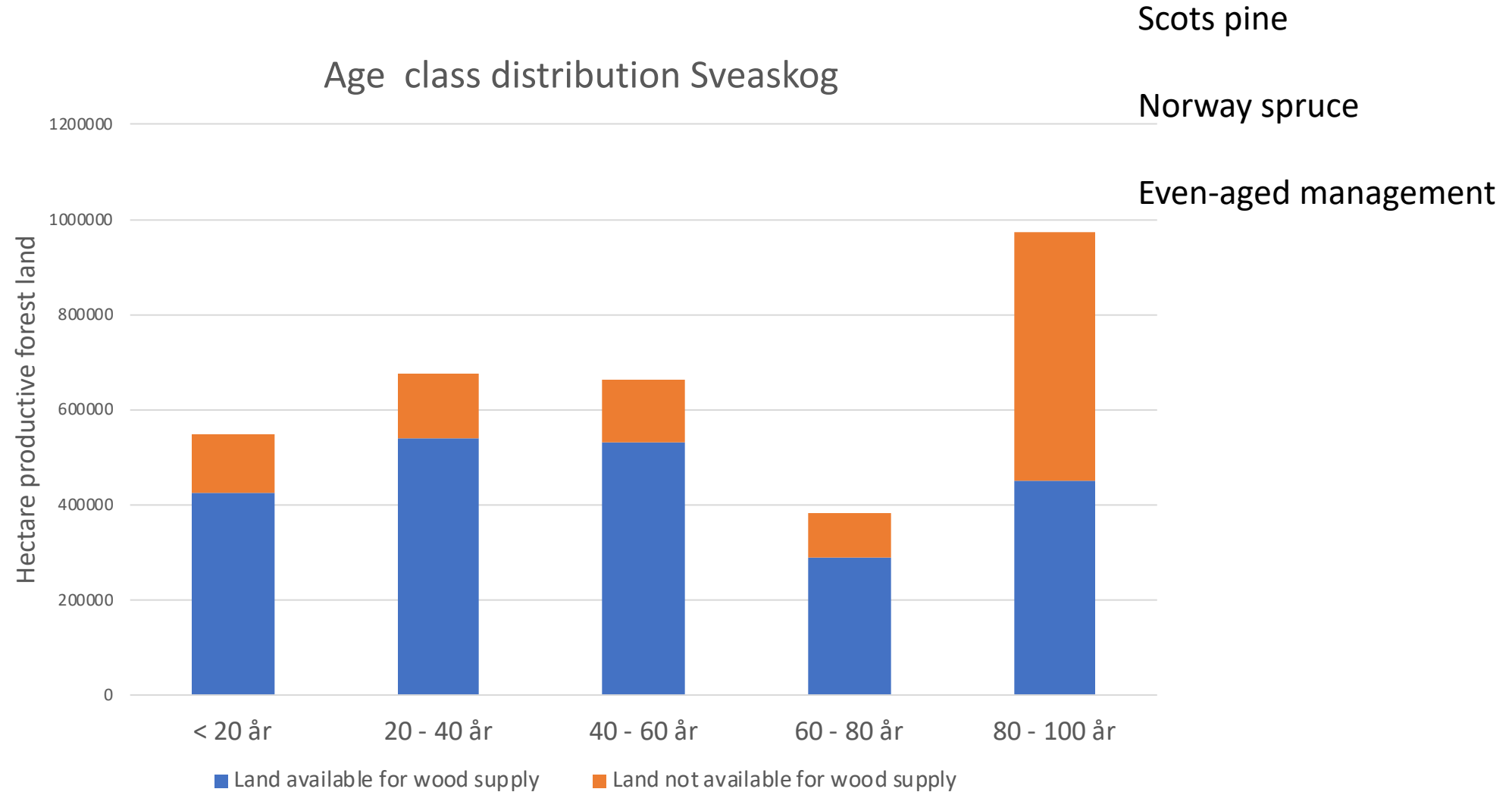
- Does not maximize carbon storage in the forest
- Defines climate benefit as the sum of carbon stock changes and substitution effects
- Understands the connections between natural resources and society's need for consumption
- Builds on a profitable forestry
- Creates employment and contributes to a growing bioeconomy
- Takes into account all the UN's sustainability goals
- Understands that if you reduce harvest on e.g. Sveaskog's land, harvesting will most likely occur somewhere else ("leakage")



My mission:

- Make a current description of forest growth and harvesting
 - Differentiate between land available and not available for wood supply
- Describe what climate benefit Sveaskog is doing right now (the reference alternative)
- Analyse what happens if continuous cover forestry is applied to 15% of the land available for wood supply
 - means continuous thinning with 15 years intervals and a maximum thinning strength of 40% of the basal area, transformation takes place in older stands
- Analyse what happens if more growth-oriented forestry is applied to 15% of the land available for wood supply
 - More intensive investments in forest regeneration, fertilisation, improved genetic seedling material, new tree species

Total productive forest area 3.2 million hectare



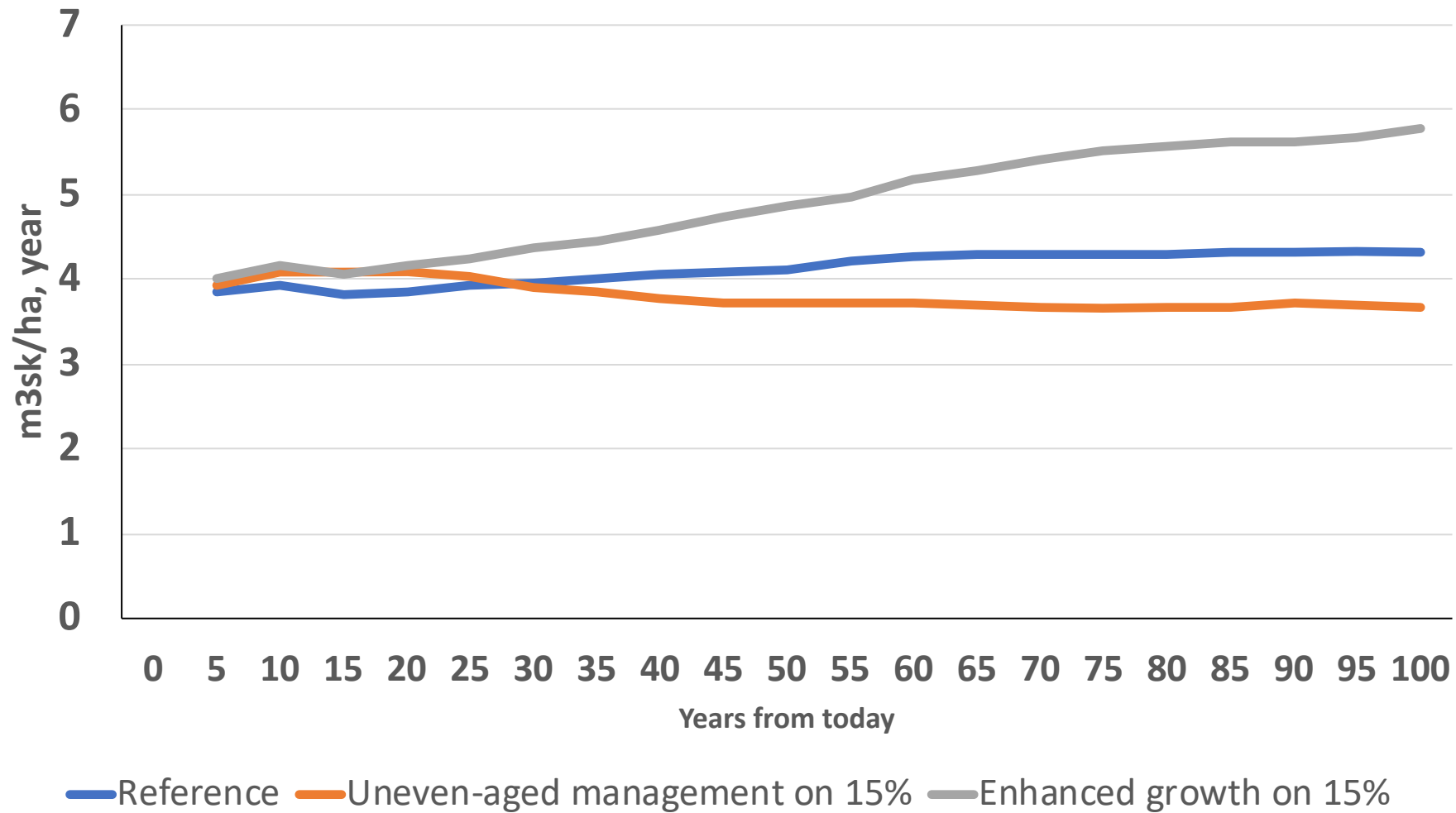
HEUREKA modelling framework



Substitution effect.

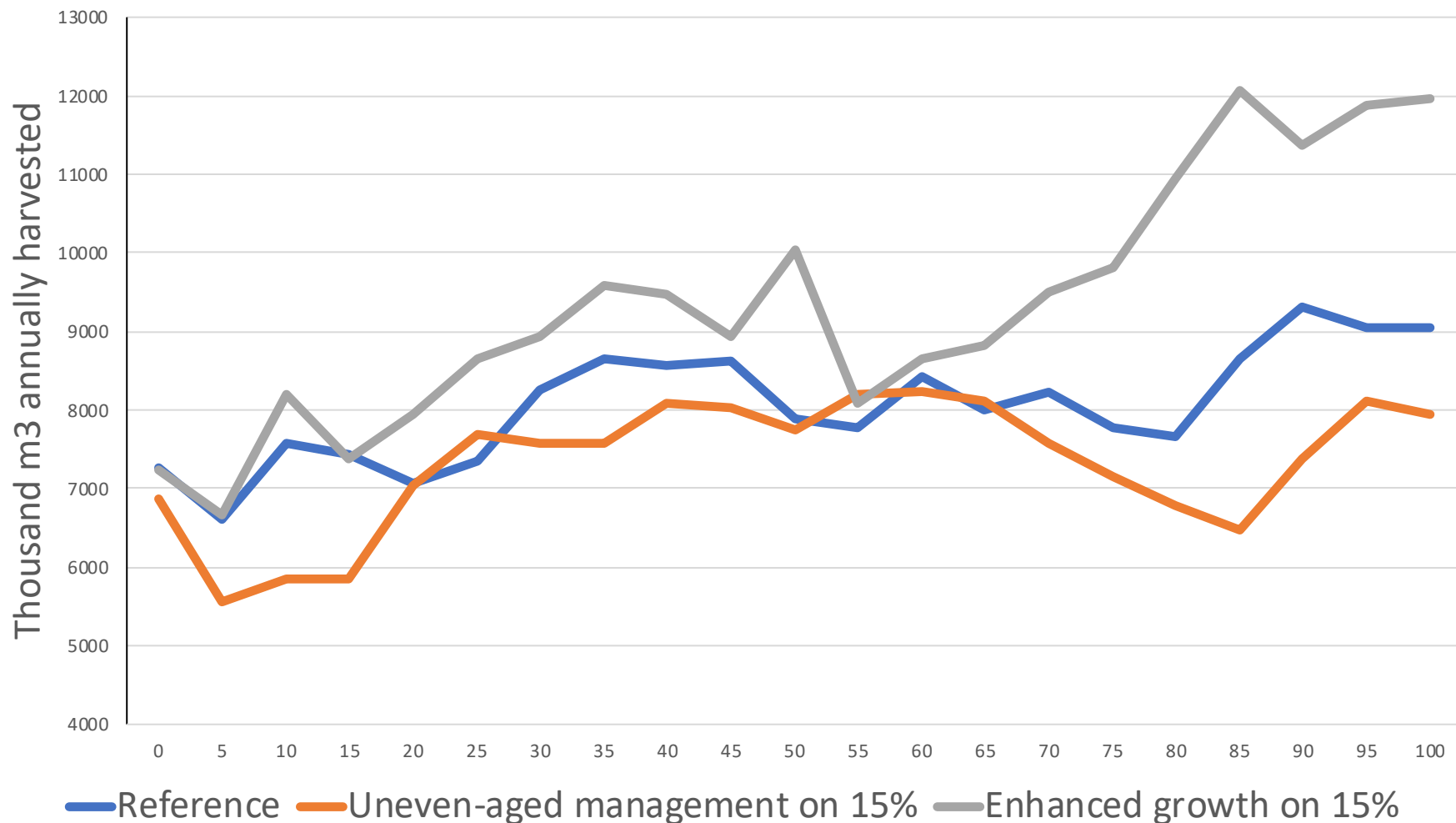
Based on harvested volumes plus the assumption that forest residues (tops and branches) was also extracted.

Net growth per hectare and year on land available for wood supply for different scenarios

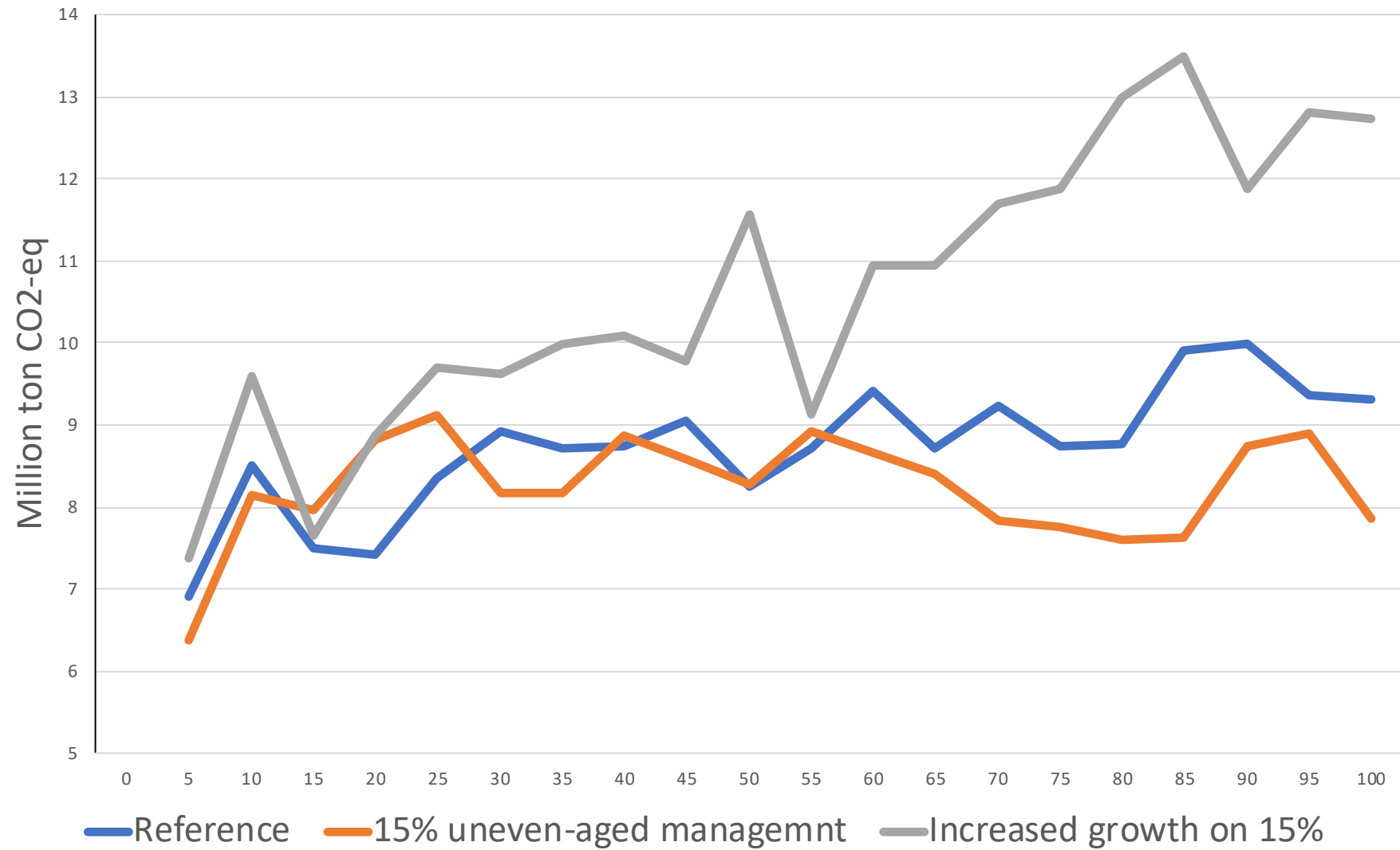


Restriction; harvesting was not allowed to exceed annual net growth

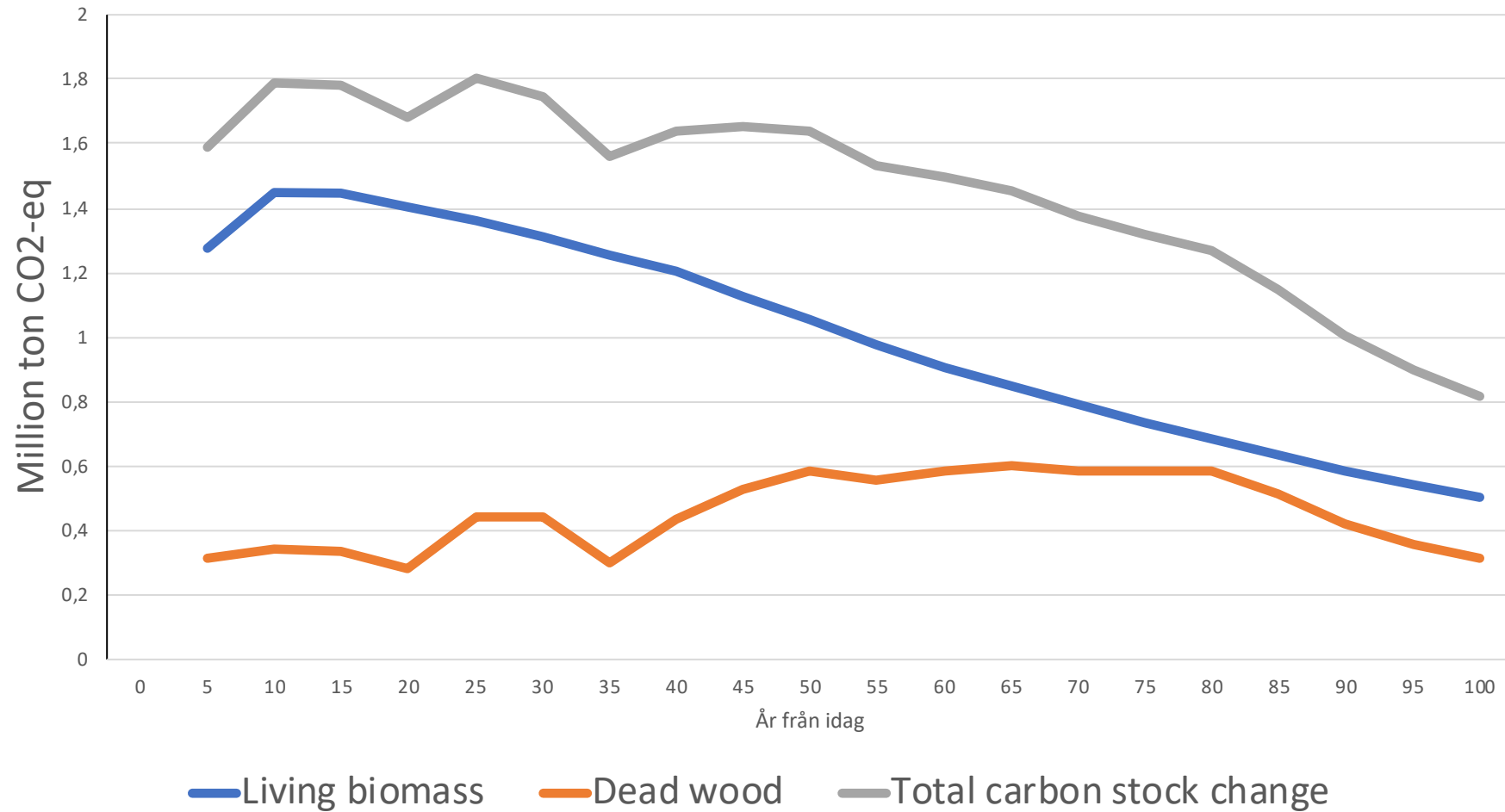
Maximum sustainable harvesting for the various scenarios



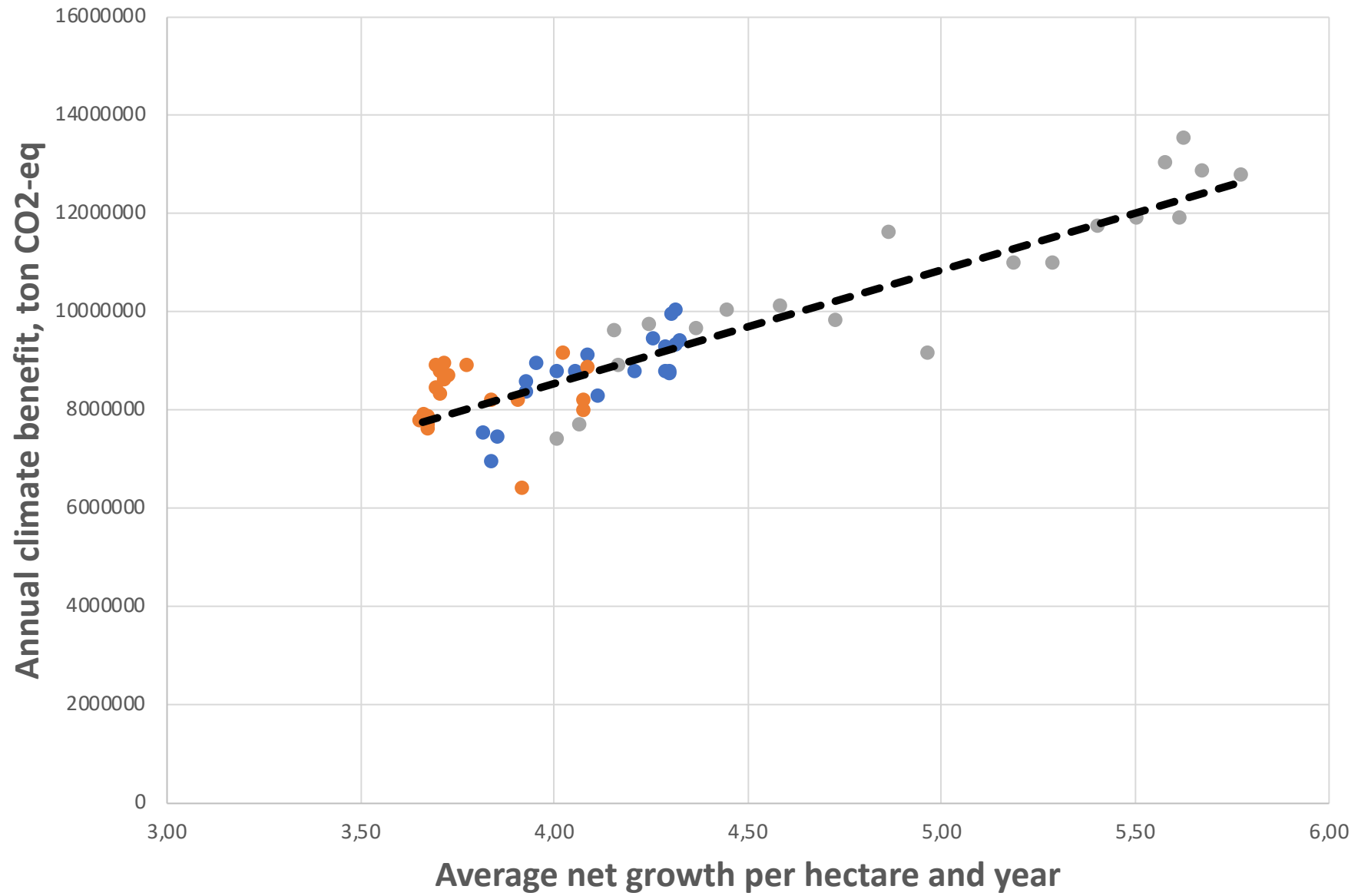
Climate benefit on land available for wood supply



Climate benefit on land not available for wood supply



Summary; Growth in the forest is of great importance for the climate benefit



Summary; We decide today what options for future generations to offer

