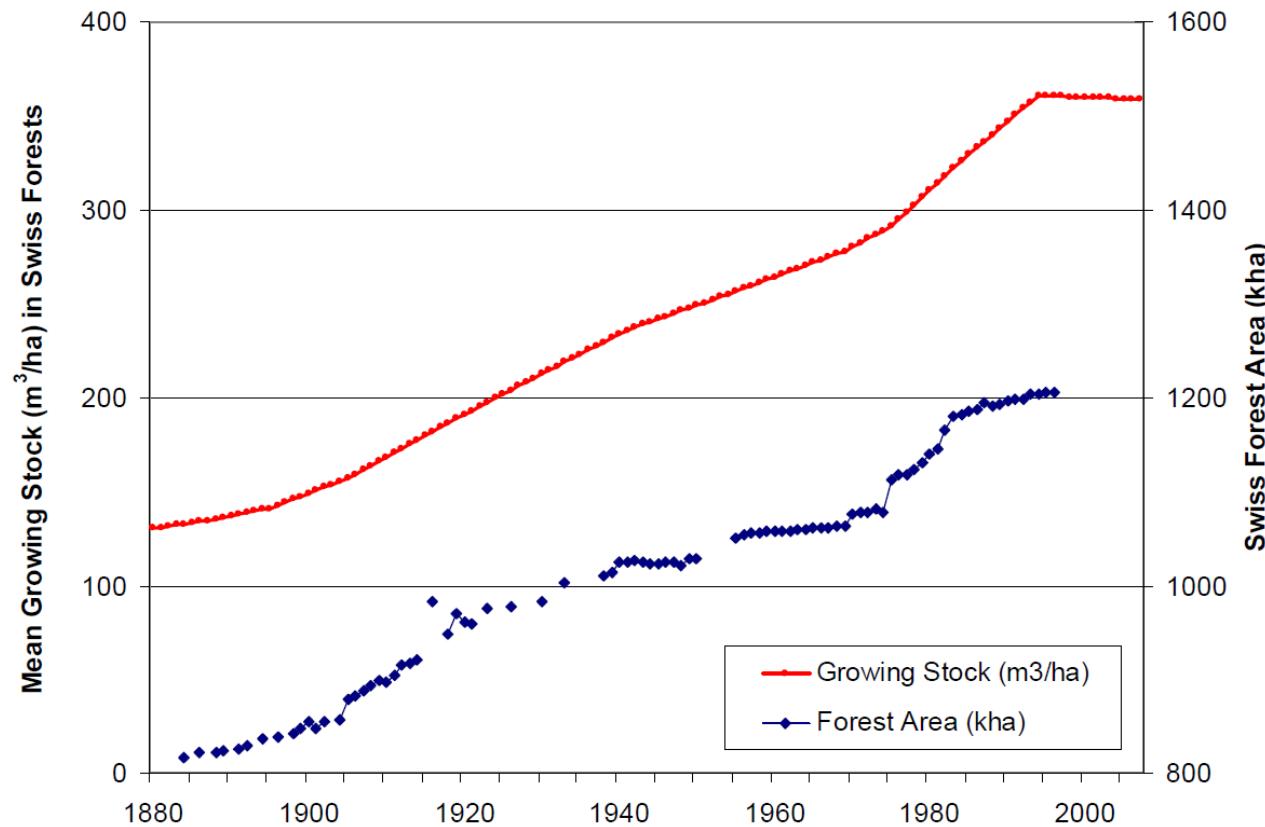




Switzerland



# Swiss Forest Act - 1876



- Prescribes sust. FM
- Prohibits clearing
- Bans Deforestation

**High C Stocks 360 m<sup>3</sup>/ha**

**High risks -> Adaptation**

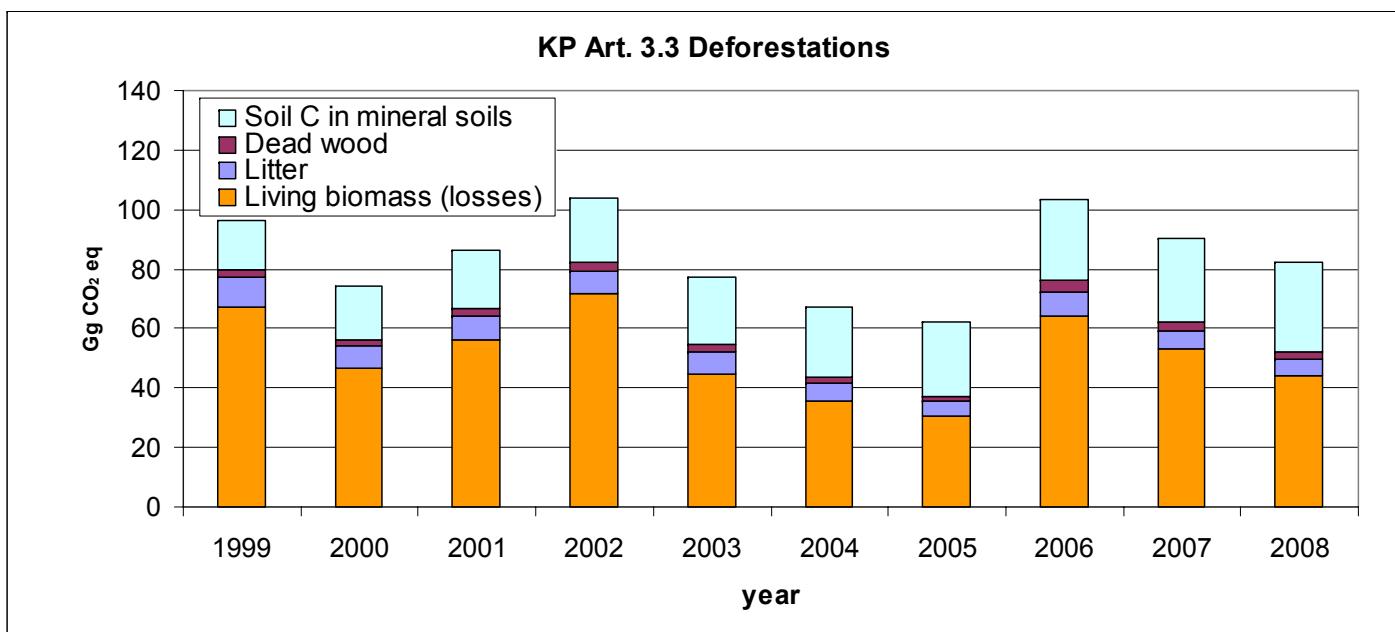
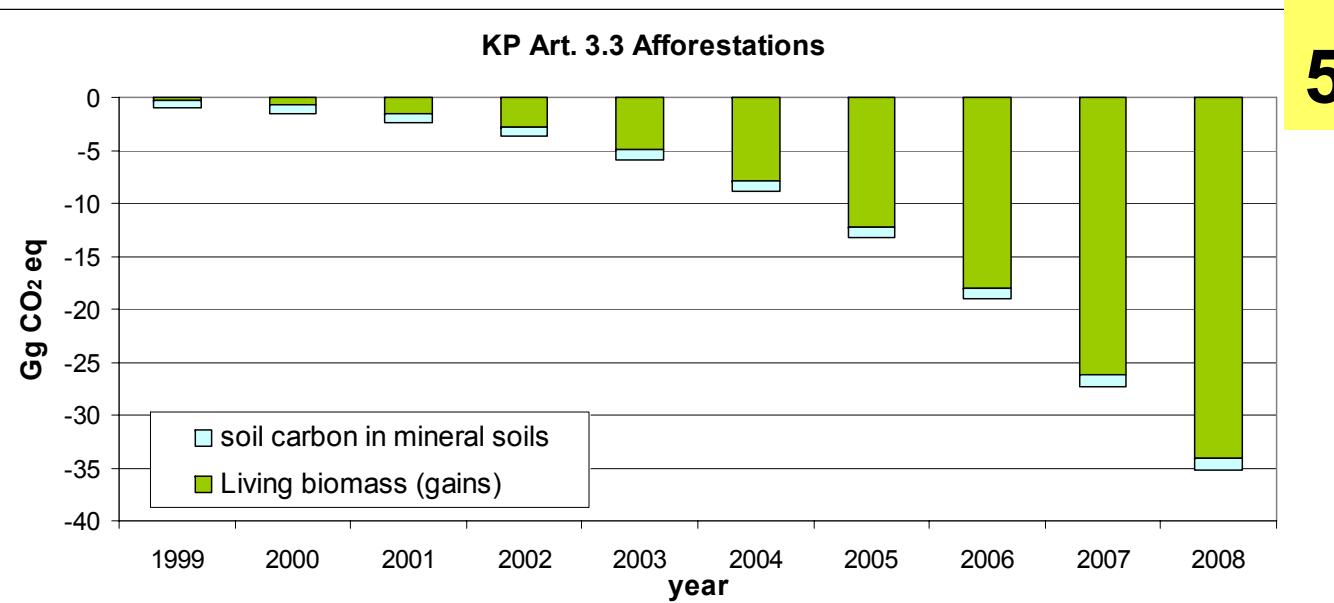
- Mitigate emissions nat. disturb.
- Secure wood supply



# LULUCF - Data Swiss NIR

1990 excl. LULUCF

**52 954 Gg CO<sub>2</sub>**





# LULUCF-Data Swiss NIR

1990 excl. LULUCF

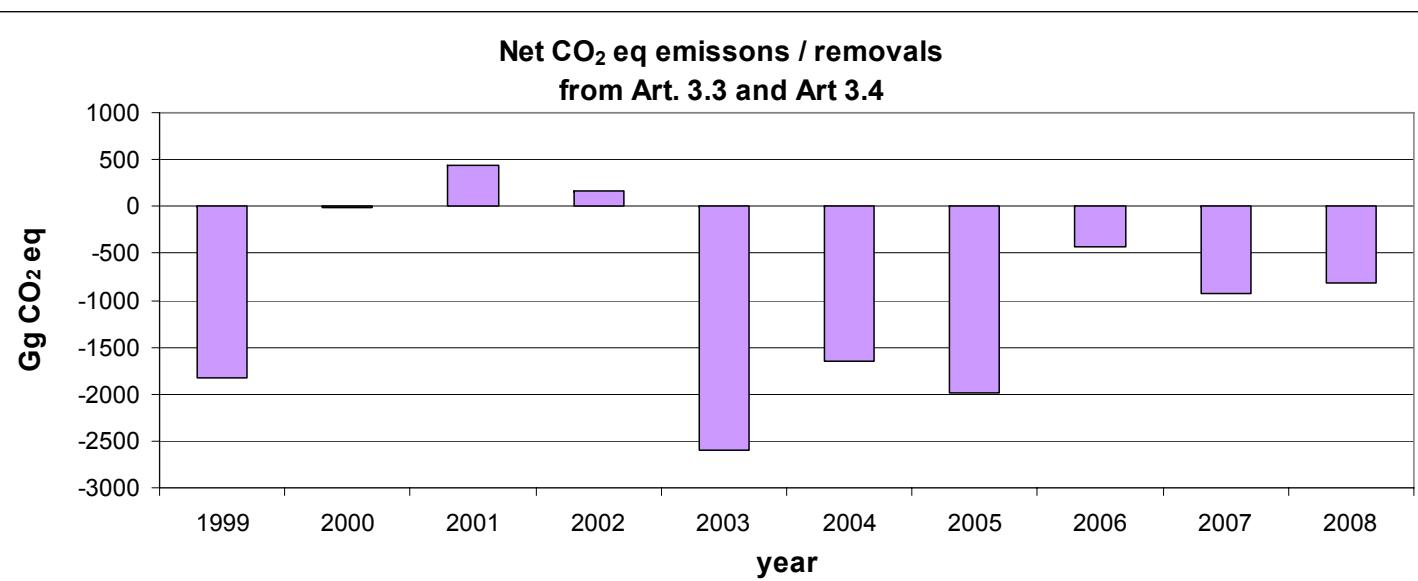
**52 954 Gg CO<sub>2</sub>**

- 1 212 kha FM Area
- 0.01 Gg CH<sub>4</sub> + 0.01 Gg N<sub>2</sub>O
- Data source: NFI
- Time series

LULUCF 1990-2008

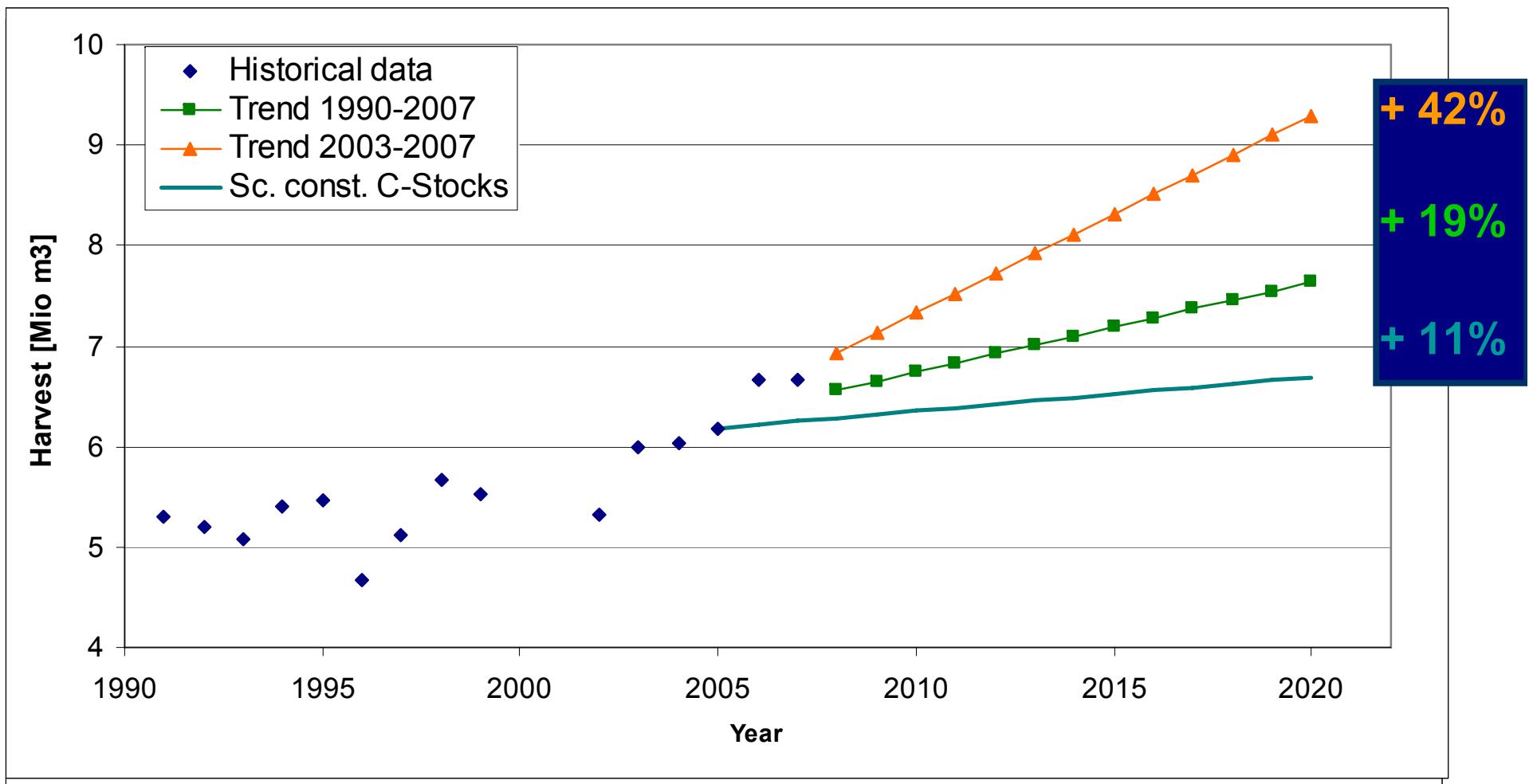
KP

1999-2008



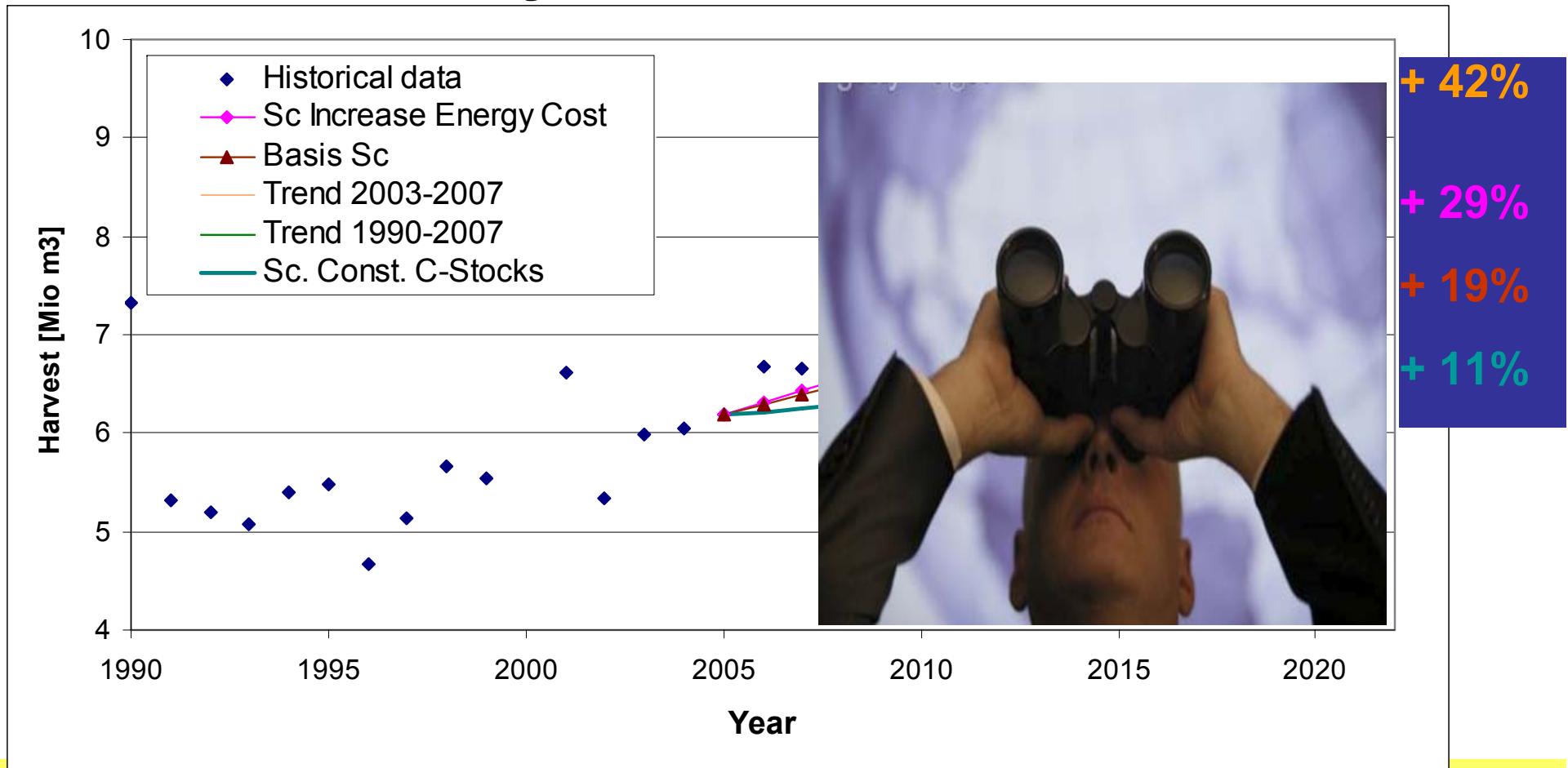


# Future Harvesting rates Trend Historical Data





# Future Harvesting rates Swiss Policy - scientific studies



Wood Resource Policy – „Potential Sustainable Wood Supply“  
ecologically & economically effective use +25%

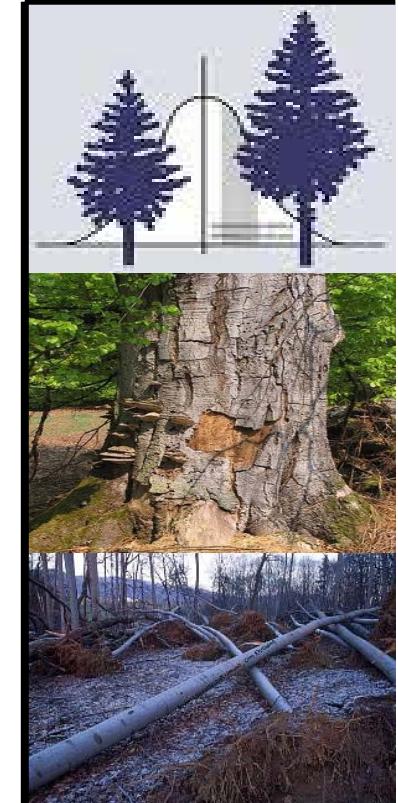
Dynamical Wood Market Model (Pauli et al. 2009) +19-29%



# Swiss Forward Looking Baseline

## MASSIMO Modell

- Empirical stochastic model; 3 NFI
- Ind. tree-based forest growth model
- Harvesting rates (BAU +19%) & Growth
  - Age class structure, Stand growth, stand structure, Ingrowth rates, Regeneration Techniques
- Mortality rate
  - ~ constant; from period without storms
- Natural Disturbances
  - Storms not included; e.g. Lothar 1999: 23.8 Mt CO<sub>2</sub>



## Preliminary results

**Swiss FLB 2013-2020**

[+0.4 to +0.9 Mt CO<sub>2</sub>]

**LULUCF contribution**

removals [0.8 to 1.7%] of 1990 emissions

**Cap FM 3% AAU**

[0.5 to 0.8 Mt CO<sub>2</sub>] 20% to 30% reduct.



Switzerland