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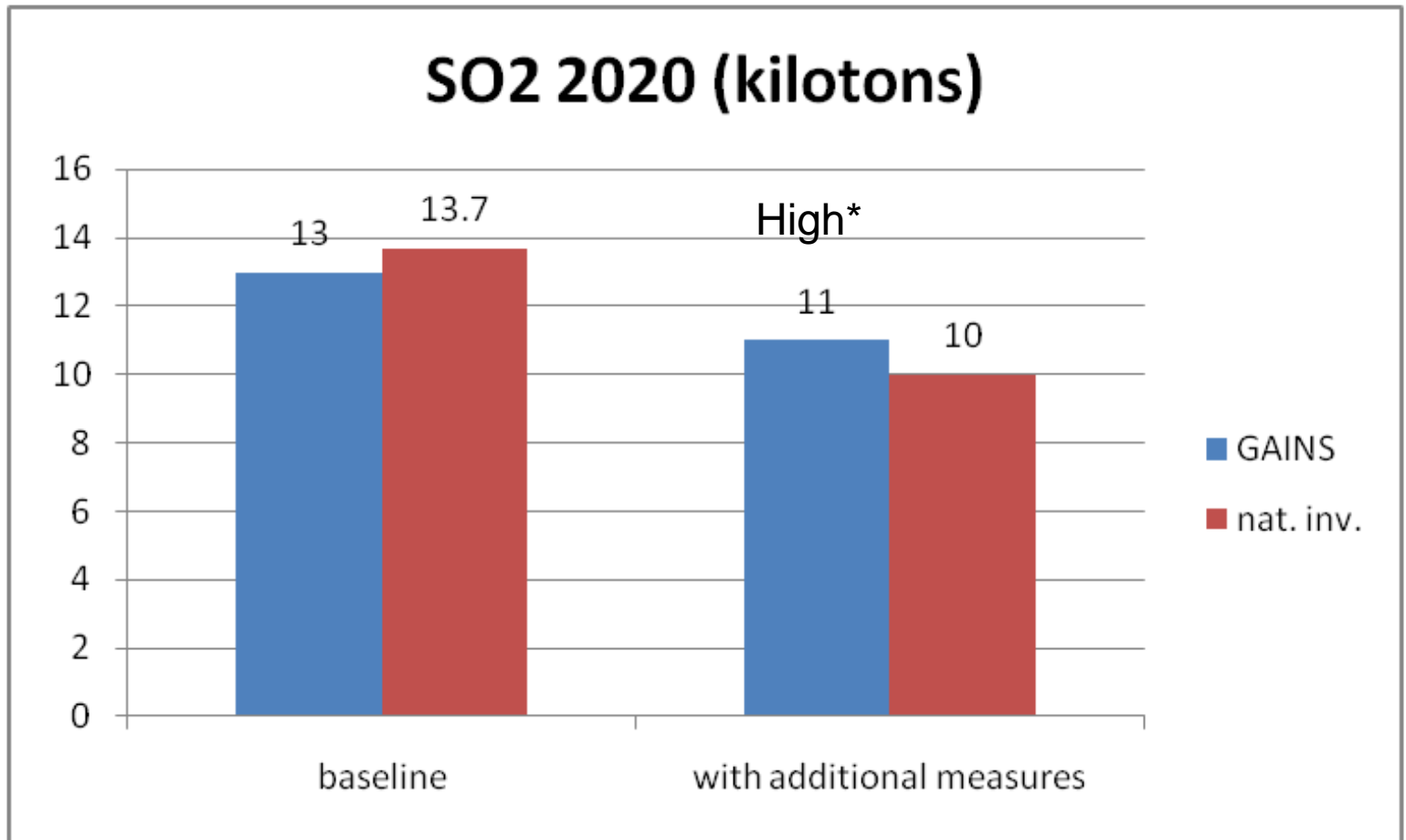
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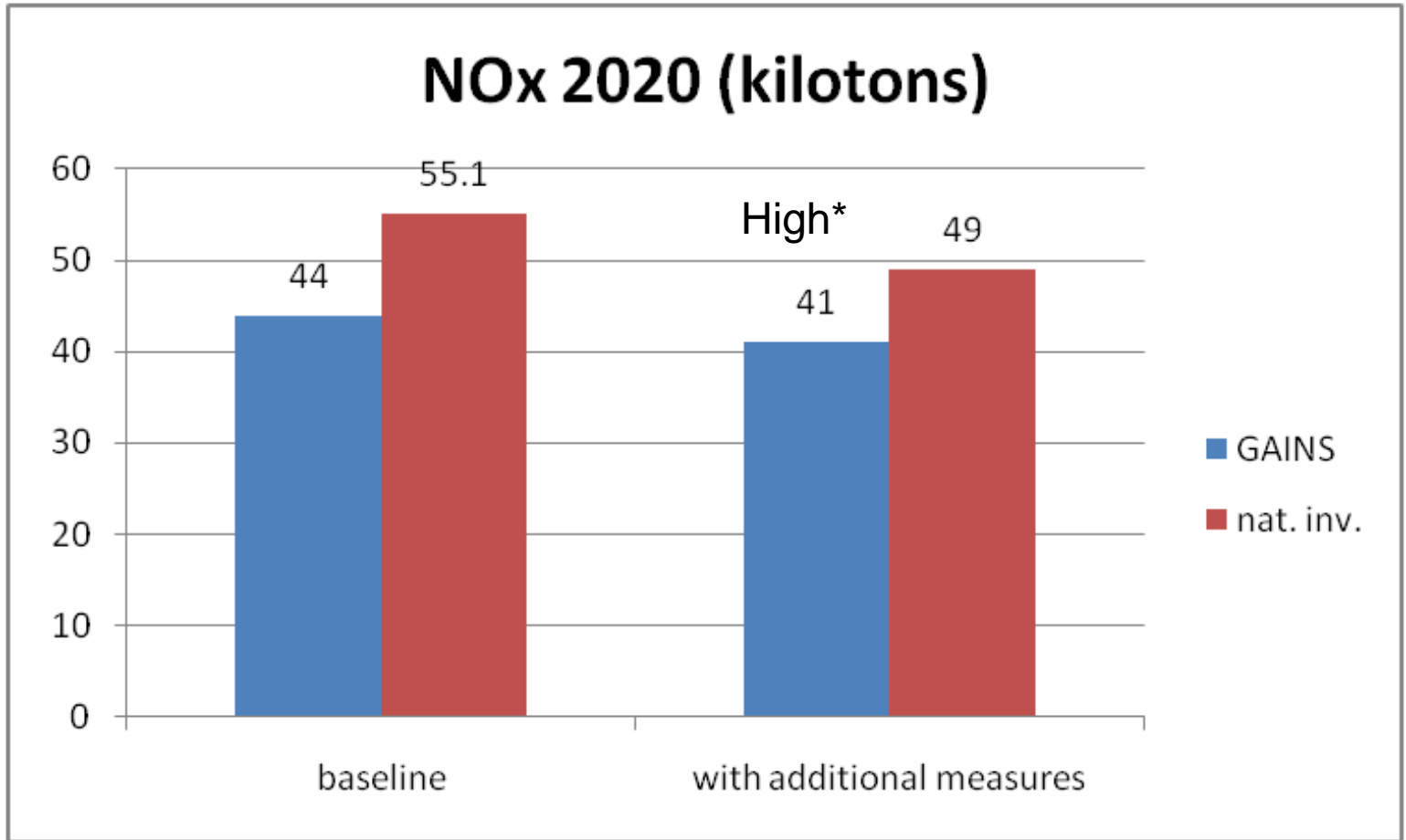
Federal Department of the Environment,  
Transport, Energy and Communications DETEC

**Federal Office for the Environment FOEN**  
Division

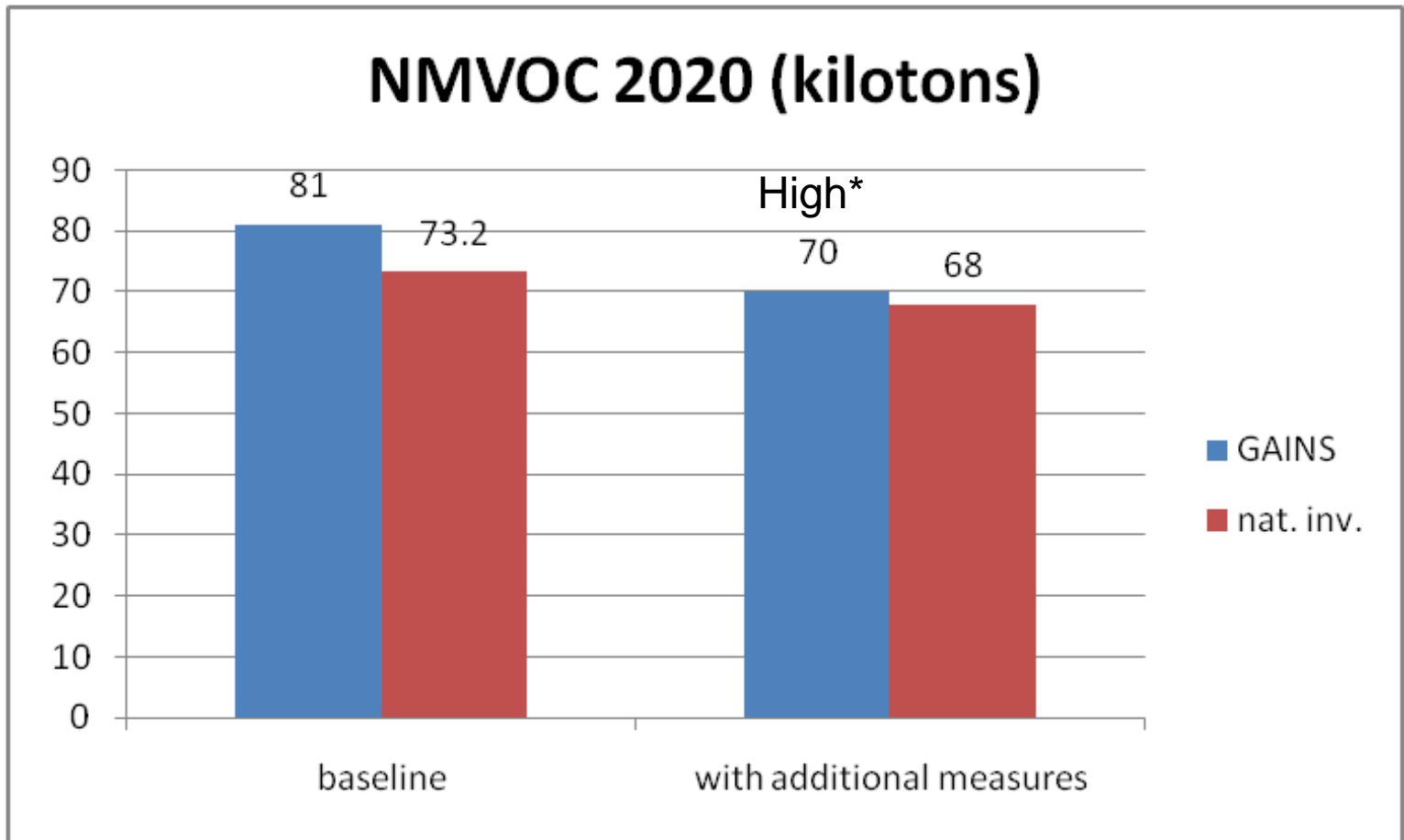
# **Revision of Gothenburg Protocol: Preliminary analysis of attainability of ambition targets for Switzerland based on national data**

TFIAM 40th session  
Oslo, 19th May 2011

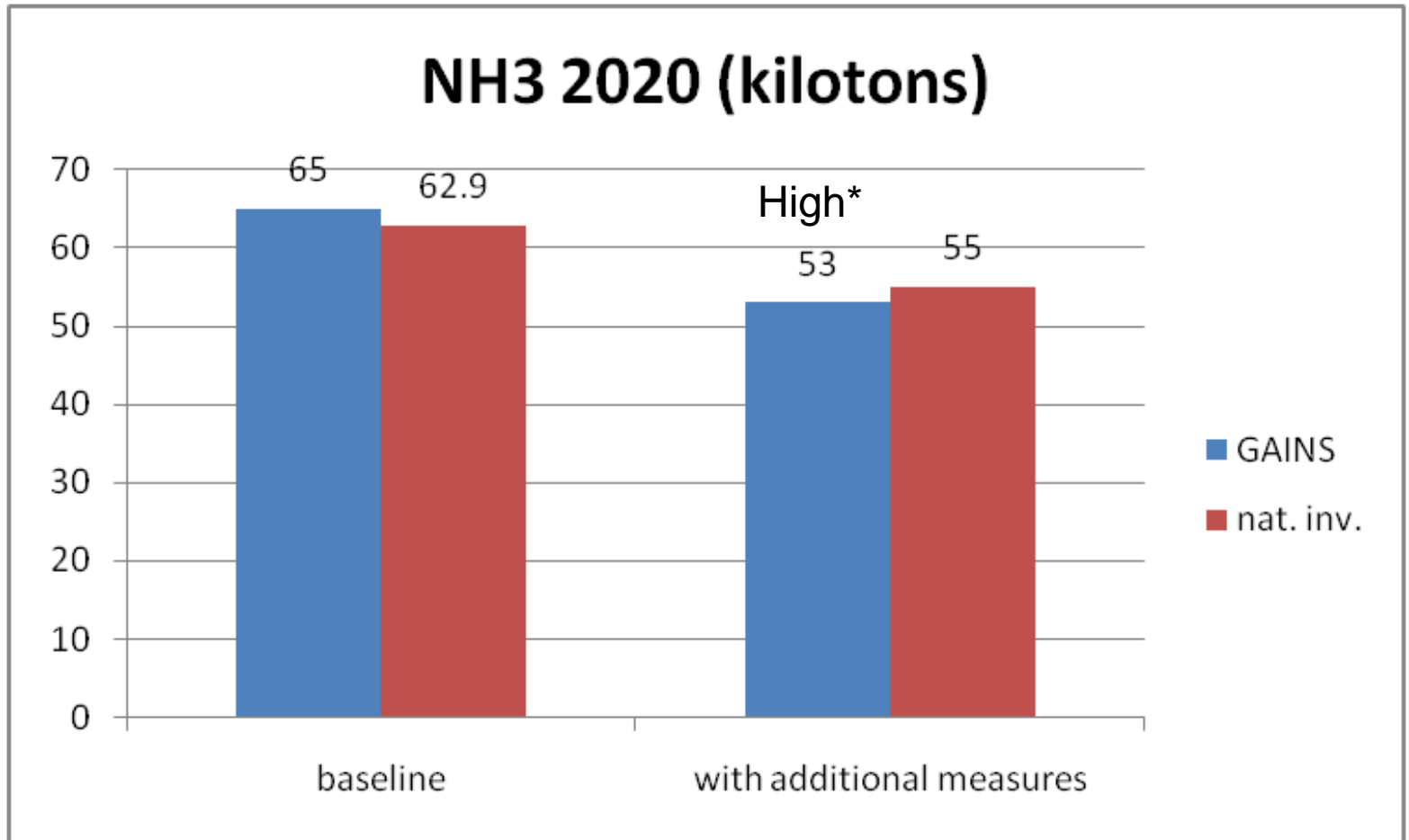


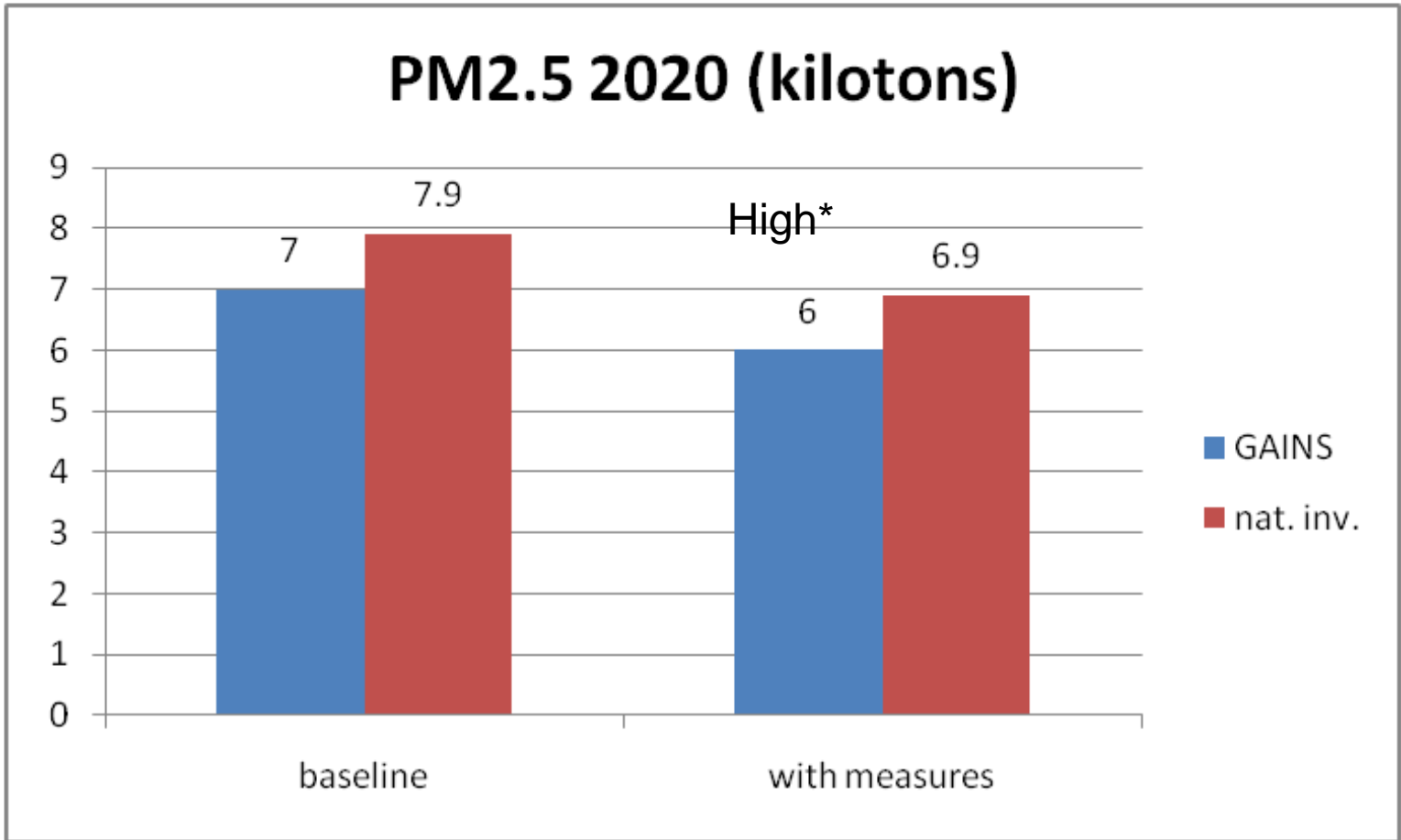


National inventory includes soil emissions and has less optimistic emission factors for diesel passenger cars



GAINS may not fully account for VOC incentive tax on solvents







# Key measures to be implemented in Switzerland

- **SO<sub>2</sub>**
  - low sulphur gasoil (10 ppm S)
- **NO<sub>x</sub>**
  - emission performance standards for new passenger cars (130 g CO<sub>2</sub>/km)
  - cement production: advanced NO<sub>x</sub> control
  - industrial combustion: advanced combustion modification & SCR
  - residential combustion: advanced combustion modification
- **VOC**
  - solvent reduction in paints
  - reduction of fugitive VOC emissions from industrial/commercial sources
- **NH<sub>3</sub>**
  - low emission manure spreading
  - covered storage
  - low emission animal houses
- **PM<sub>2.5</sub>**
  - biomass combustion: advanced dust control
  - industrial processes: advanced dust control
  - ban on agricultural waste burning



# Conclusions

- ambition targets corresponding to the MID scenario are achievable in Switzerland
- even HIGH\* scenario might be feasible
- additional measures for NH<sub>3</sub> are still subject to discussion
  
- Special need for joint action from Swiss perspective:
  - BC abatement (in the framework of PM abatement)
    - residential heating
    - efficient DPF for NRMM
  - NH<sub>3</sub> abatement (incl. cattle)