TFIAM-CIAM

Scenario recommendations for the GP revision & need for guidance from WGSR

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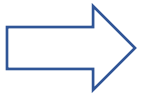
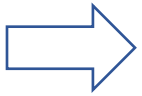
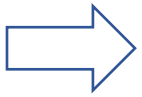
Recommendations by the scenario expert group

Modelling priorities		Complementary modelling tasks that are recommended but with lower priority
Optimization for a gap closure between BL and MTFR; with a sensitivity for gap closure between LOW BL and MTFR		
Prioritize least-cost optimization for a given (50%) reduction target		Complement least-cost optimization for a given reduction target with possible further equity (egalitarian) constraints and compare the results
Optimize for reduction targets “region wide” and “in each country”		
For biodiversity optimize for an equal protection over all ecosystem types (using Average Accumulated Exceedance, based on minimum or mean empirical critical loads)		Show what protecting all ecosystems versus protecting specific ecosystems (e.g., forests) would entail
Calculate scenarios illustrating staged/phased approaches for EECCA, WB & Türkiye		Calculate scenarios showing where a given sum of money (e.g. 0.2% of GDP) would be best spent on

Recommendations by the scenario expert group

- Further scenarios that should be assessed
  - Showing the difference between the BL used in the current Policy brief version and the new BL (expected in June 2024)
  - In an ex-post assessment show for every scenario the implied reduction in BC emissions
  - Assess target levels with a cost-benefit analysis (CBA) to show if $B \geq C$
- Further suggestions for which the availability of scenarios needs to be assessed
  - Use alternative energy scenarios (more hydrogen, more ammonia as energy carrier …)
  - Assess the results of an agricultural transformation
  - Assess the land use impacts of scenarios

Guidance needed from WGSR

Do you object to

- Optimisation for 2040 relative to 2015?
  - 2005 would be without ambition for some countries; and EECCA region lacks data for 2005
  - Projections could include all years (in 5-year steps) between 2015 and 2050
- Applying targets in optimisation both to the UNECE region as a whole and to each country?
  - Meeting a target is easier for a larger region; considering also targets by country brings in an egalitarian element
- Using both health metrics Premature Deaths and Years of Life Lost (YOLL)?
- Using the static population (2015) approach for health optimisation?
  - The static approach shows impacts of changes in air pollution only
  - The dynamic approach shows the combined impacts of changes in air pollution and in demography (population growth and ageing)
- Using the risk-based approach for health (premature deaths or YOLL per 100.000 inhabitants) for optimisation?
  - Note that for a risk-based approach (deaths/100.000 inhabitants) the difference between using static vs dynamic demography is limited (to ageing only)

Guidance needed from WGSR

Do you object to

- Using the indicator Average Accumulated Exceedance (AAE) for nature protection?
- Using minimum or mean empirical critical loads in optimisation for nature protection?

- Limiting the analysis to anthropogenic (the avoidable) $PM_{2.5}$ exposure?
- Further explore the possibility for a combined $PM_{2.5}$&O_3 target ?

What do you suggest

- For the modelling of staged/phased approaches (EECCA/WB/Türkiye)?
- Do you need analyses of further egalitarian principles
    - If yes, which, e.g. on maximum costs per GDP per country, minimum health improvement per country, minimum air quality improvement per country …?

Further illustrations in presentation by CIAM under agenda item 3

Thank you!

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Presentations and conclusions from all earlier TFIAM and EPCAC meetings found at:
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