

# Chapter 11 Points for Discussion

- Metrics and dependence on context and goal
- Scope of metrics (dimensions)
- Application of metrics in the report
  - Illustrations to gain insight and explain
- Various alternatives

# Metrics and dependence on context and goal

**Adequacy of metrics:** Depends on the overall purpose

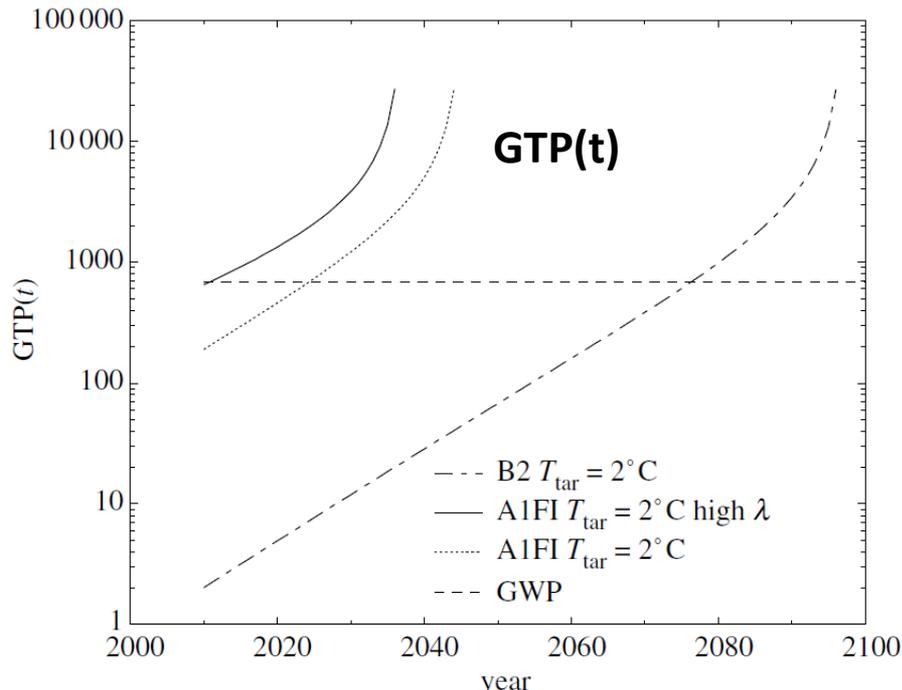
- not clearly stated beyond a certain focus on rate and short term warming.

An evaluation of adequacy of metrics must be put into a context (see IPCCs report from Expert meeting on metrics)

Do not start with the metric. Clarify the goal (or possible goals)

Same behaviour as Manne & Richels (econ mod)

- Stabilization
- Short term/Rate of warming



If one is concerned about more than the long term temp, then an additional target could be formulated (e.g. a short term target or rate of change target).

Difficult to force BC into the current framework if we are concerned about more than long term change.

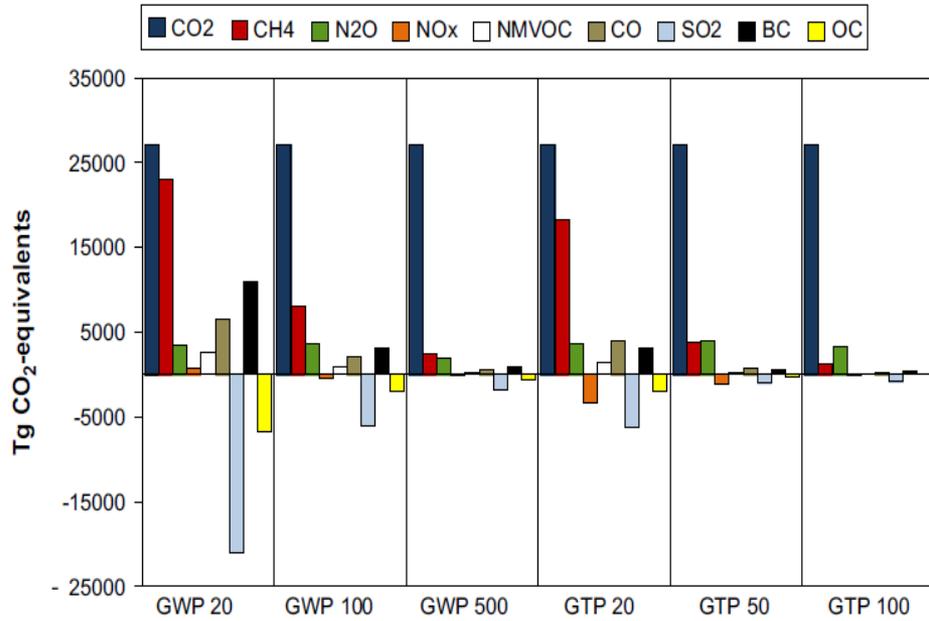
# Scope of metrics (dimensions)

- **Spatial: for both DRIVER and REPONSE**
- **Short term or long term ? (rate or level)**
- **Across sources**
- **Across components:**  
“All” or separated into groups?      (single basket vs multibasket)
- **Compare or not compare to effects of CO2 ?**

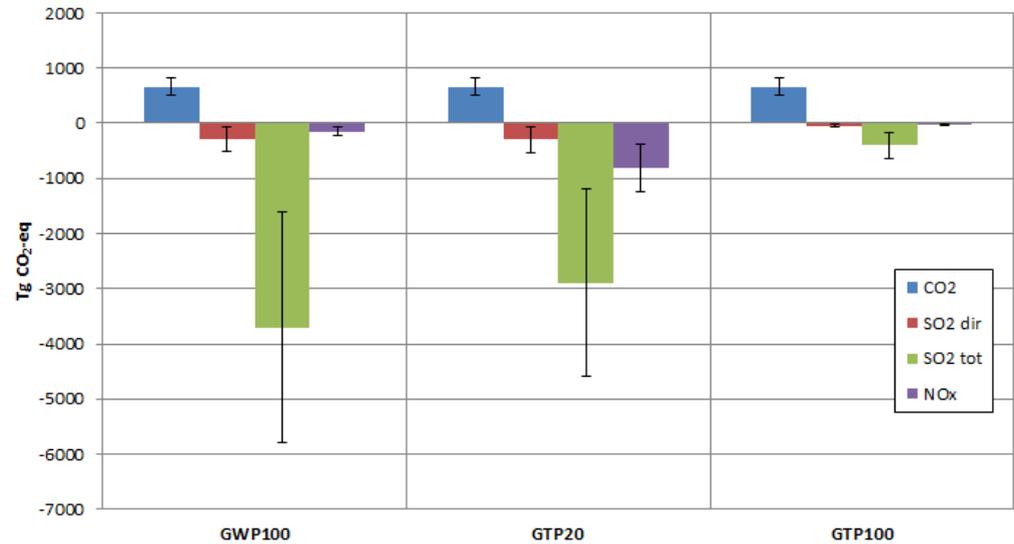
Unclear whether the report is searching for metrics for

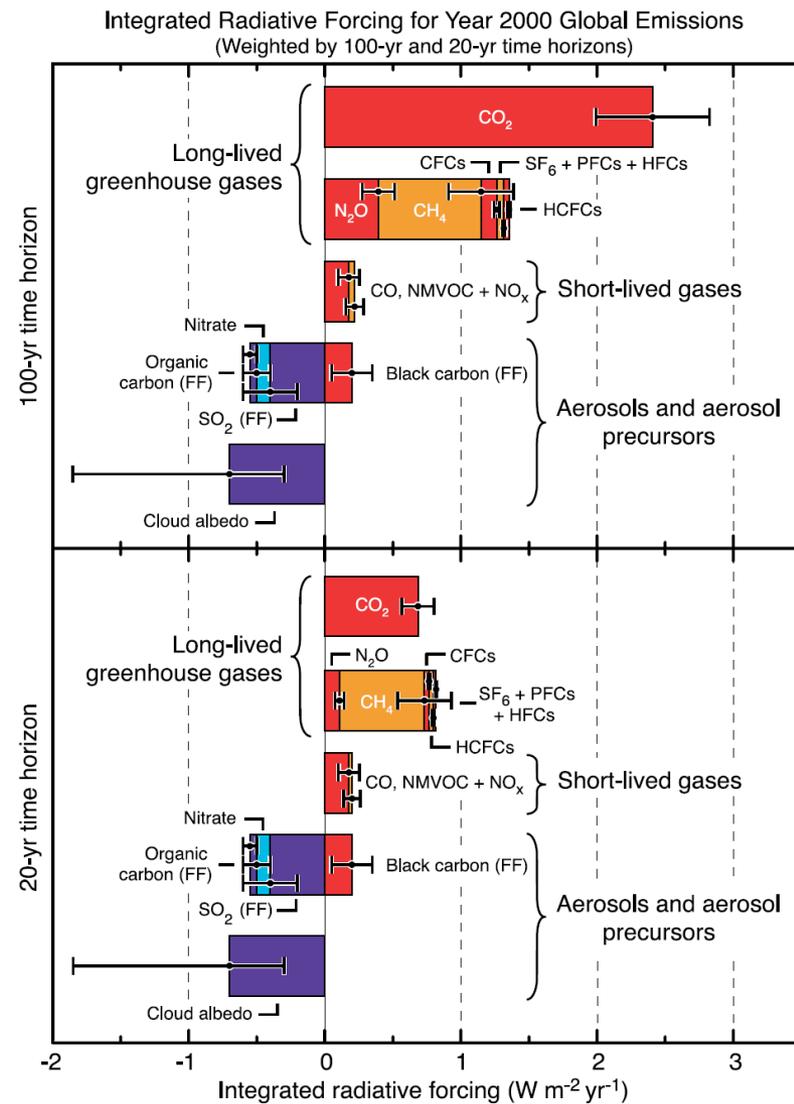
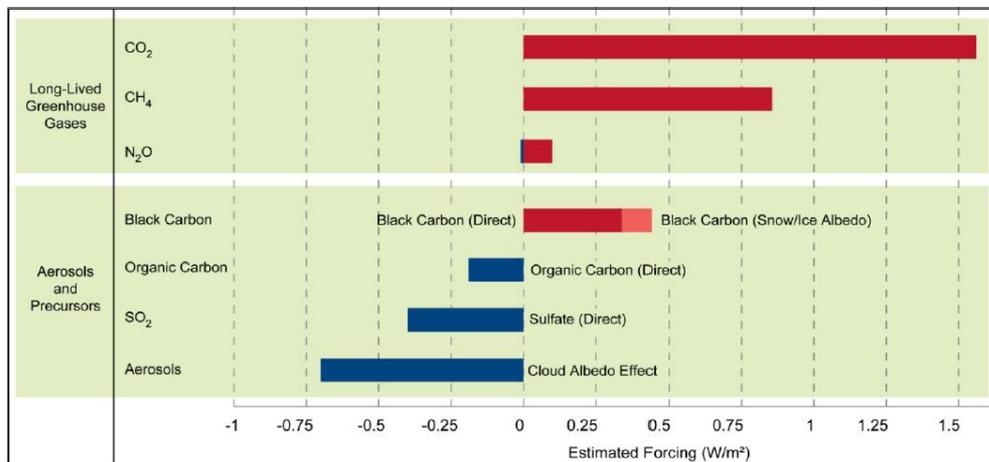
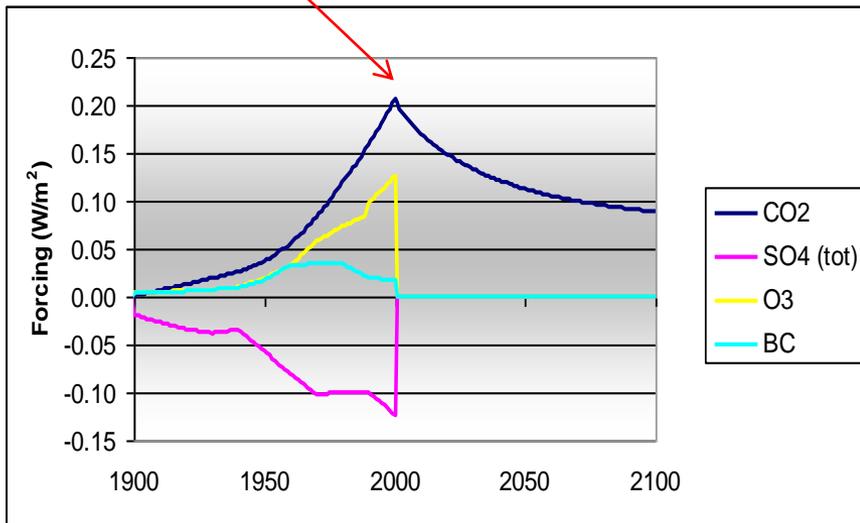
- i) choosing among various BC reduction alternatives or
- ii) across components.

# Application of metrics in the report

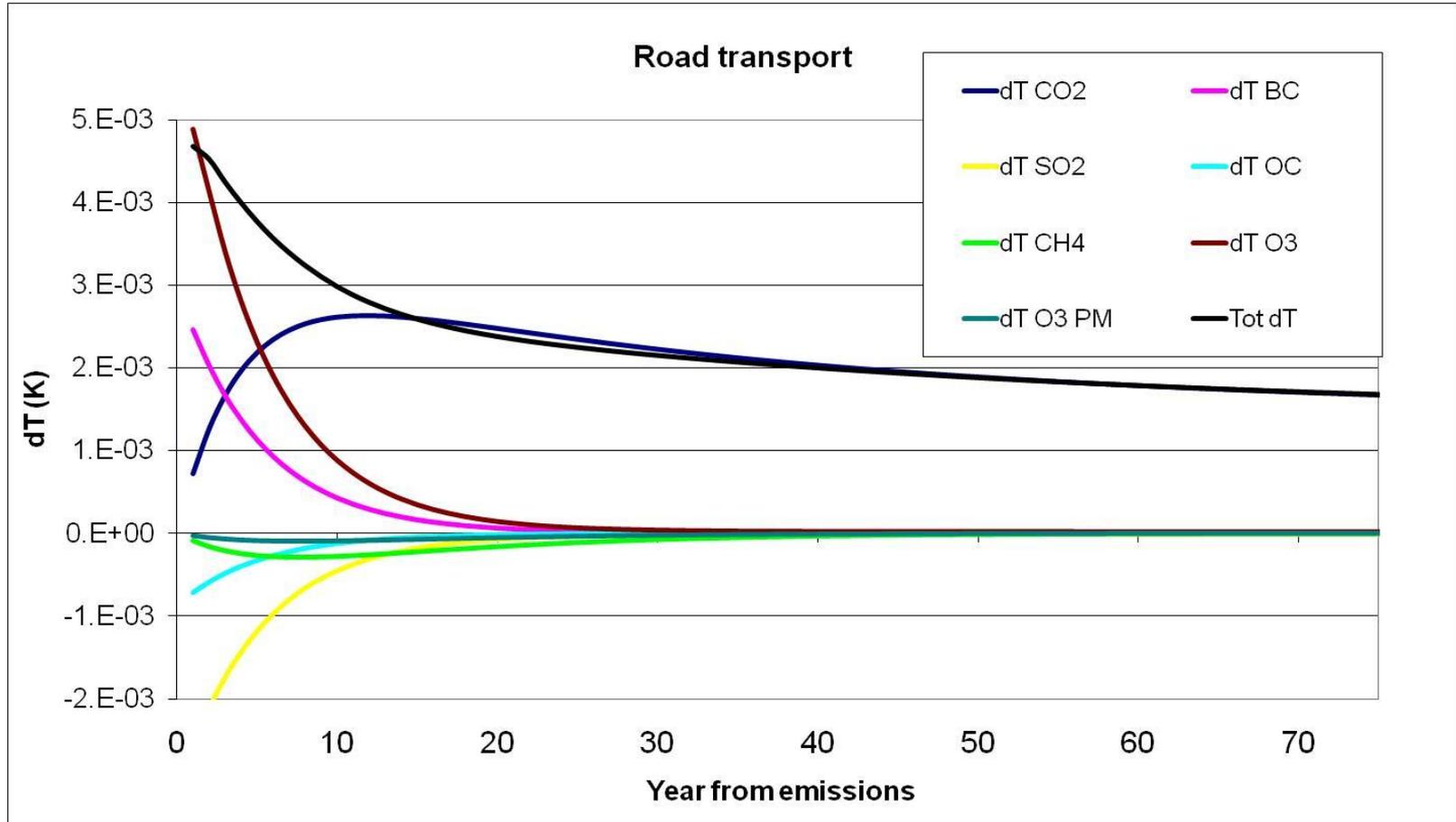


## CO<sub>2</sub>-eq (shipping)





# Forward looking: Future effects of emissions in one year Alternatively: sustained emissions



# Various alternatives

- I would not call OC/BC (or, OC/EC) a climate metric
- **SRE**: similar to  $GTP_{\text{sustained}}$
- **SFP**: similar to AGWP
  - 1) Not new (same as AGWP with a regional delimitation in response which is important)
  - 2) A different unit is confusing and may lead to misunderstandings
  - 3) The regionality in RF does not indicate regional pattern in **dT response** (cfr Shindell & Faluvegi, 2009)