Annexes

Annex 1: List of experts who were consulted or interviewed and who provided comments on the interim report and earlier drafts of the final report.

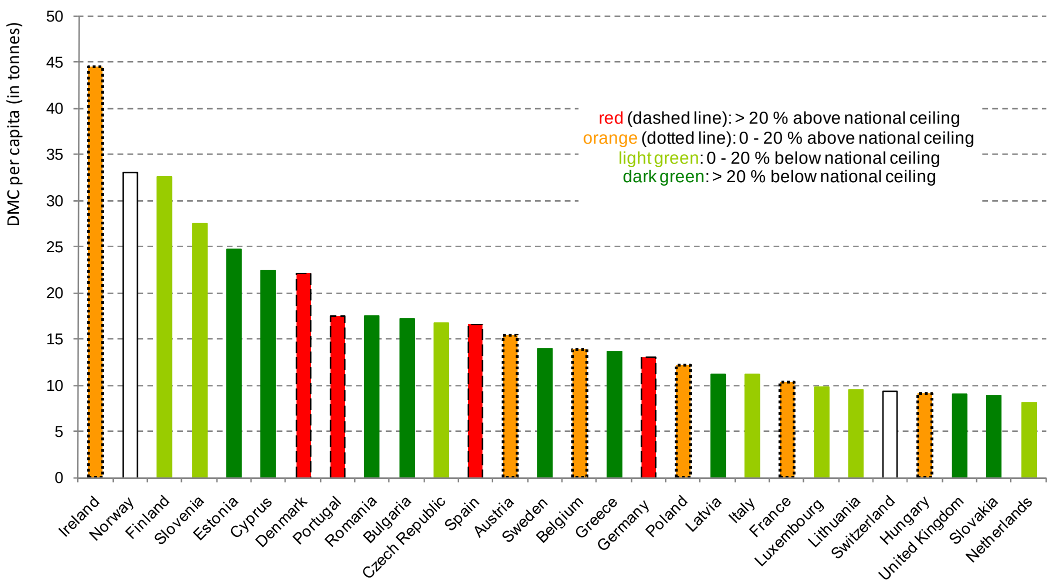
Expert (affiliation and expertise)	Result
Johan Rockström (Stockholm Resilience Centre; general expert on thresholds)	Gave comments and feedback on the general approach of the study: Maximum use of non-renewable resources may be a tough threshold to analyse; resource use could perhaps be approached in terms of peak resource use (e.g. peak oil) biodiversity is an important area
Thorsten Blenckner (Stockholm Resilience Centre; expert on threshold modelling)	Reiterated and provided more details on the findings on water quality (see Box 1)
Frank Verheijen (JRC; expert on soil formation, soil erosion)	His inputs are included in this report. He also named additional experts: Robert Jones (Cranfield University, UK, involved in PESERA and ENVASSO projects), Claudio Bosco (JRC, USLE project), Mark Stephens (Cranfield University, UK, involved in ENVASSO project)
Michael Nagy (Austrian Federal Environmental Agency; water expert)	Provided written feedback on water quantity: Care should be taken with regard to terminology and differing definitions of water quantity; Mr Nagy did not recommend the Water Exploitation Index as a measure for water stress, as it relates water extraction to available water resources. Water consumption ("loss" due to the use in products or evaporation) does cause quantitative stress for the basin, while water extraction for cooling water, electricity generation, etc. (of which 95-99% are piped back) may cause local stress (and competition for usage) but do not impact the basin significantly (at least in terms of water quantity).
Gorm Dige (EEA; expert on indicators and use of non-renewable resources)	Gorm Dige suggested to focus on the maximum use of non-renewable energy (under the assumption that the biomass system is balanced) and compare to the amount of CO_2 emitted through various sectors e.g. agriculture, transport, etc. and compare to the two degree target set in Copenhagen at COP UNFCCC. However, as issues related to CO_2 and climate change are excluded from this project

	the project team kept the DMC indicator.
Robert Jones (Cranfield University, UK, PESERA project at EU scale, ENVASSO project; expert on soil erosion)	His inputs are included in this report in the sections on soil erosion
Claudio Bosco (JRC, USLE project; expert on soil erosion)	recommended as additional sources by Frank Verheijen
Mark Stephens (Cranfield University, UK; ENVASSO project; expert on soil degradation)	recommended as additional sources by Frank Verheijen
Federico Pulselli (University of Siena, general expert on thresholds)	Inputs on the general concept of thresholds included in this report
Steven Eisenreich, JRC	Overall and health and water quality matters
Markus Erhard, EEA	Land use and soil related matters
Dorota Jarosinska, EEA	Health and water related matters
Rob Collins, EEA	Water quality
Peter Kristensen, EEA	Water quantity

Annex 2: Additional example illustrations for the suggested proxy threshold indicator for non-renewable resources

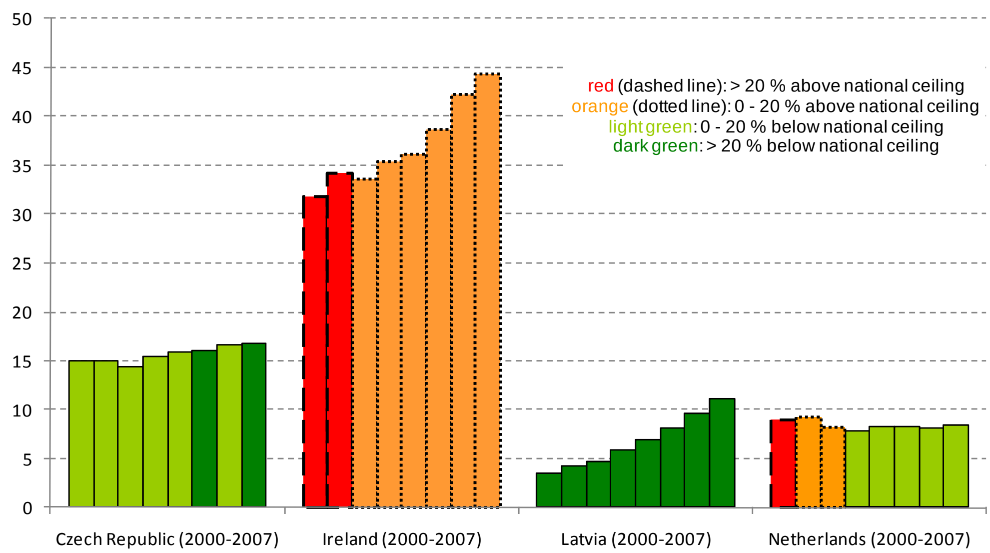
In addition to the illustrative example discussed on NOx discussed in chapter 4.4.3, we include the graphs for the remaining categories of NMVOC, SO_2 and NH_3.

Figure 1 DMC (non-renewable) per capita in relation to national NMVOC emissions (2007)



Source: own calculations based on EUROSTAT MFA data and EEA emission data

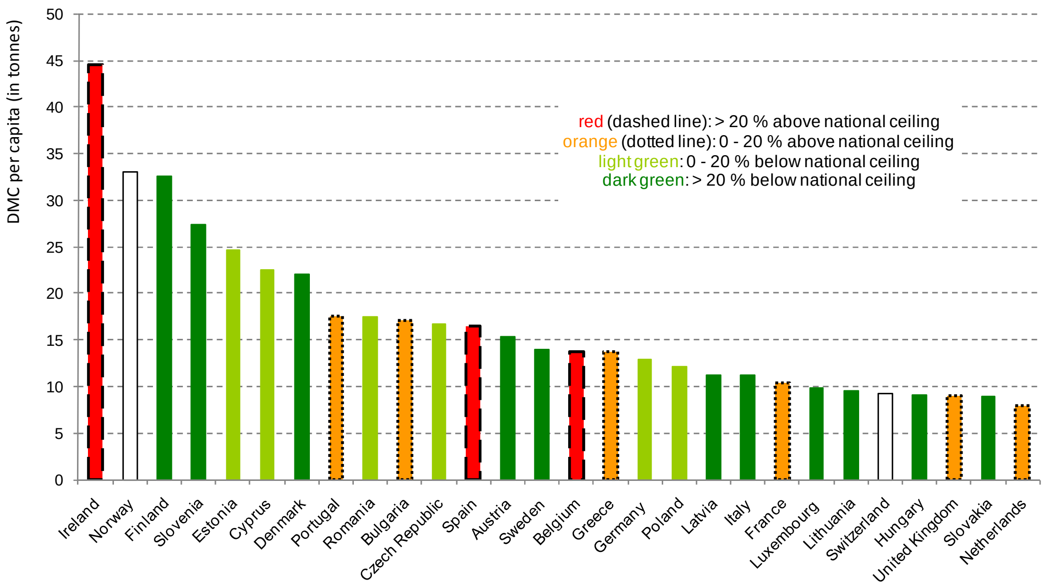
Figure 2 DMC (non-renewable) per capita in relation to national NMVOC emissions, four selected countries (2007)



Source: own calculations based on EUROSTAT MFA data and EEA emission data

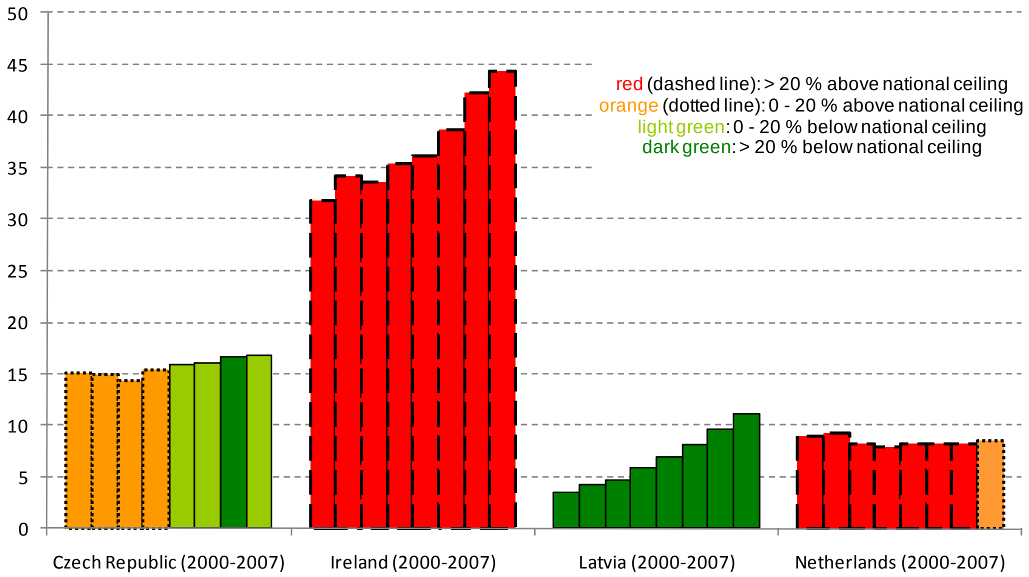
As with the case of NO_x discussed in the main part of the report, also the NMVOC trends provide a heterogeneous picture. Countries with very different levels of DMC have NMVOC emissions below or above the national emission ceiling. The analysis of the four selected countries reveals the general positive trend, i.e. emissions are decreasing, in particular in the old Member States, however no linear relationship between DMC per capita numbers and the emission performance can be established.

Figure 3 DMC (non-renewable) per capita in relation to national SO2 emissions (2007)



Source: own calculations based on EUROSTAT MFA data and EEA emission data

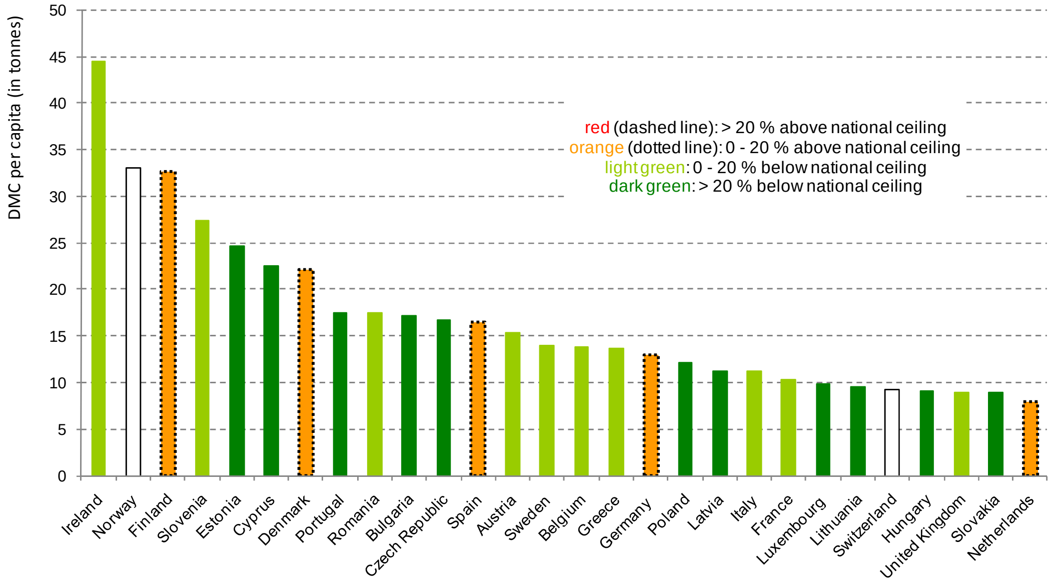
Figure 4 DMC (non-renewable) per capita in relation to national SO_2 emissions, four selected countries (2007)



Source: own calculations based on EUROSTAT MFA data and EEA emission data

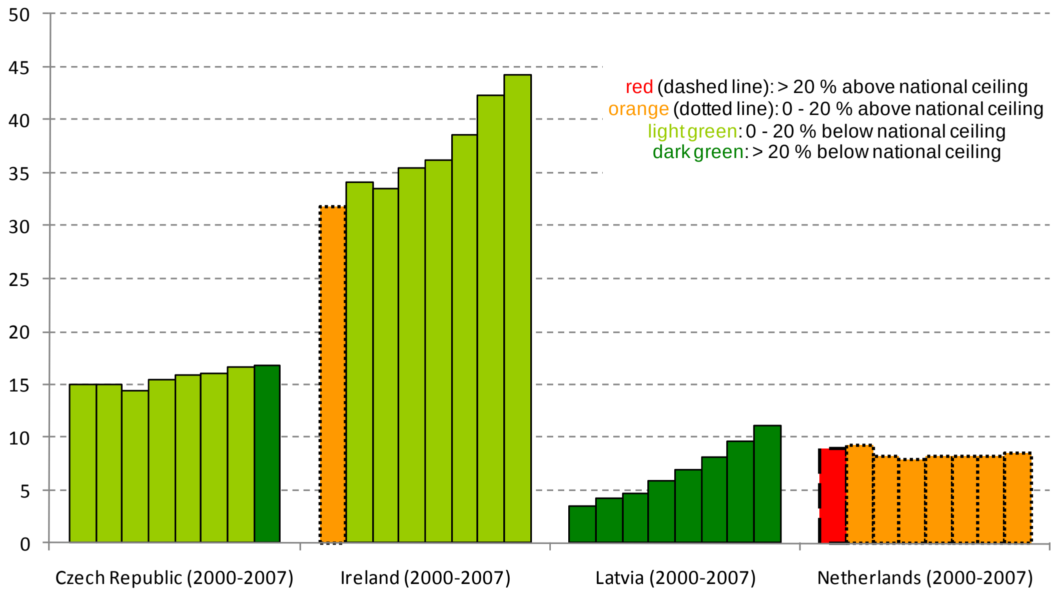
Figures 3 and 4 illustrate the relation between DMC per capita and the emission ceilings regarding SO_2 emissions. Again, the DMC per capita numbers provide no indication whether or not a country is below or above its emission ceiling. The Netherlands' per capita DMC is around a quarter of that of Ireland, but both countries are above their national emission ceiling for SO_2.

Figure 5 DMC (non-renewable) per capita in relation to national NH3 emissions (2007)



Source: own calculations based on EUROSTAT MFA data and EEA emission data

Figure 6 DMC (non-renewable) per capita in relation to national NH3 emissions, four selected countries (2007)



Source: own calculations based on EUROSTAT MFA data and EEA emission data

Finally, Figures 5 and 6 illustrate the situation regarding NH_3 emissions. The development regarding this category of air emissions is more positive compared to the other three pollutants, as many countries have emissions below their national emission ceiling for NH_3. However, again, no clear link can be established with their level of DMC.