

Source: EMEP, 2016.

Notes: Fourth highest MDA8 represents the fourth highest daily maximum of the 8-hour running mean and is used as an indicator of ozone

(a) For more information, see Tables 1.1 and 1.3.

In conclusion, for the annual mean concentrations, increases were widespread in the 1990s and constant levels were observed in the 2000s; however, an encouraging trend in the reduction in the O<sub>3</sub> peak was observed in Europe during the period 1990-2012. The levels remain, however, above the WHO air quality guideline (50 ppb =  $100 \mu g/m^3$ ) and the EU long-term objective (60 ppb =  $120 \mu g/m^3$ ),

indicating that further efforts are needed. There is also a discrepancy between observed O<sub>3</sub> trends (10 % reduction between 2001 and 2012) and emission changes (30% reduction over the same period 2001-2012). Even so, it can be stated with confidence that the decreasing trend in O<sub>3</sub> was mainly caused by the reduction in the European emissions of O<sub>3</sub> precursors.