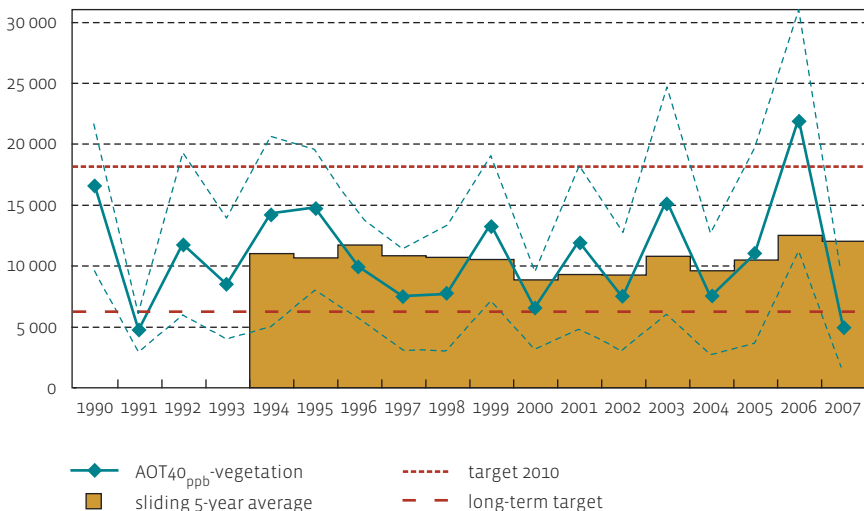




AOT40_{ppb}-vegetation (($\mu\text{g}/\text{m}^3$).hours)



The points on the solid line show the average value for field crops and semi-natural vegetation in Flanders for each year. The dotted lines indicate the lowest and the highest annual values.

Source: IRCEL, interregional air database

Summer of 2007 was favourable for vegetation

Natural ecosystems and cultivated plants can also suffer damage from exposure to ozone. For crops this leads to a reduction in yield. In the new European Directive on Air Quality (2008/50/EC) the long-term target and the target for 2010 for the protection of vegetation from the former ozone directive were preserved. Both targets have been also incorporated into the MINA plan 3+ (2008-2010).

The seasonal excess for crops (AOT40_{ppb}-vegetation) is the surplus above 80 $\mu\text{g}/\text{m}^3$ of all the hourly ozone values between 8 am and 8 pm added up during the months of May, June and July. The target for 2010 is 18 000 ($\mu\text{g}/\text{m}^3$).hours, averaged over 5 years. This target was not exceeded in Flanders. After a temporary fall between 2000 and 2002, the 5-year average has however increased again because of the unfavourable years 2003 and 2006. In 2007, the seasonal excess for crops was lower than the long-term target of 6 000 ($\mu\text{g}/\text{m}^3$).hours. This is mainly thanks to favourable meteorological conditions. During the summer of 2007 it was mainly influenced by maritime air flows and few days with high maximum temperatures were recorded.

To also reach the long-term target in varying meteorological conditions, the emissions of the various countries in Europe must decrease even further.

($\mu\text{g}/\text{m}^3$).hours	1990	1995	2000	2004	2005	2006	2007
AOT40 _{ppb} -vegetation	16 497	14 636	6 403	7 319	10 819	21 910	5 031
sliding 5-year averaged	..	10 669	8 880	9 610	10 493	12 504	12 057
AOT40 _{ppb} -vegetation							