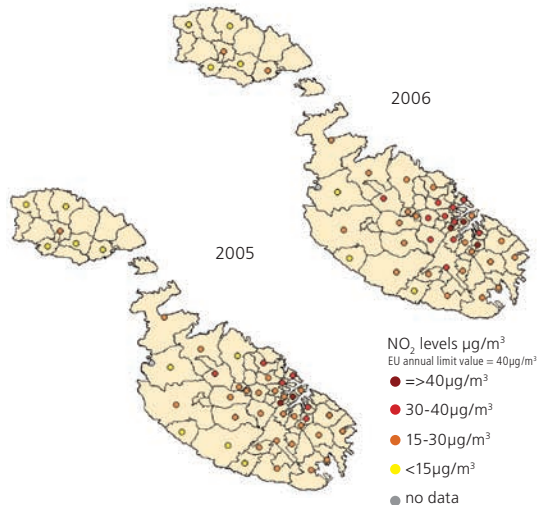


## A4 NITROGEN DIOXIDE CONCENTRATIONS

☹️ Key policy question: Do nitrogen dioxide concentrations in Malta meet EU air quality standards?

The main source of nitrogen dioxide ( $\text{NO}_2$ ) in urban areas is motor vehicle exhaust, power station emissions, heating plants and industrial processes. Exposure to high  $\text{NO}_2$  levels may interfere with the ability of blood to carry oxygen, resulting in dizziness and shortness of breath, while prolonged exposure may lead to respiratory failure.<sup>19</sup> At  $25.4\mu\text{g}/\text{m}^3$ , average national  $\text{NO}_2$  concentrations remained well below the  $40\mu\text{g}/\text{m}^3$  EU annual limit value for human health protection in 2006, although concentrations increased once again, this year by 12% (from  $22.8\mu\text{g}/\text{m}^3$  in 2005), while between 2004 and 2005 the increase was 13%. In 2006, values exceeded EU standards in 3 localities: Floriana, Hamrun and Fgura. In Floriana the annual average increased from  $45.6\mu\text{g}/\text{m}^3$  in 2005 to  $51.4\mu\text{g}/\text{m}^3$  in 2006, in Hamrun it increased, during the same period, from  $41.8\mu\text{g}/\text{m}^3$  to  $46.6\mu\text{g}/\text{m}^3$ , while in Fgura the value increased from  $33.6\mu\text{g}/\text{m}^3$  in 2005 to  $41.6\mu\text{g}/\text{m}^3$  in 2006. Regarding individual sites, St. Anne's Street in Floriana once again recorded the highest average concentration, increasing by 16% from  $79.9\mu\text{g}/\text{m}^3$  in 2005 to  $92.8\mu\text{g}/\text{m}^3$  in 2006. Similar to last year this was followed by Eucharistic Congress Road in Mosta, which however registered a 6% decrease between 2005 and 2006, from  $66.2\mu\text{g}/\text{m}^3$  to  $62.2\mu\text{g}/\text{m}^3$ . Average concentrations at 12 individual sites exceeded the EU annual limit value.

<sup>19</sup> <http://glossary.eea.europa.eu/EEAGlossary>.



Source: MEPA