



Air emissions and noise protection

We control air emissions at all of our sites around the world. As well as greenhouse gases, we also analyse emissions of air pollutants. Our production processes result in air emissions of inorganic gases such as carbon monoxide (CO), sulphur oxides (SO χ), nitrogen oxides (NO χ), ammonia (NH $_3$) and volatile organic compounds (VOC). The VOC emissions are primarily released during the painting and cleaning of metals such as gas cylinders, storage tanks and plant components. The majority of CO, NO χ and SO χ emissions arise from combustion processes, while NH $_3$ may be emitted during nitrous oxide or acetylene production.

We remain committed to our goal of further reducing air emissions or – where possible – eliminating them altogether. In 2010, we managed to lower our air emissions relative to the previous year.

Air emissions

The Linde Group

in tonne	es 2010	2009	2008	2007
VOCs	182	236 ¹	287	330
NH ₃	70	78	348	323
CO	1.747	2.161	2.202	2.341
NOx	717	856	994	812
SOx	620	730	582	427

The values stated apply to all locations legally obliged to report these air emissions.

Please find the exact definitions in our Corporate Responsibility Accounting brochure.

We work closely with our customers to develop solutions aimed at reducing emissions. Pure oxygen, for example, offers a range of environmental benefits for foundries, heat treatment facilities, steelworks, non-ferrous metalworks, waste treatment plants and recycling facilities. Replacing air with oxygen eliminates nitrogen ballast in combustion and reheating processes. It also improves energy efficiency and reduces CO_2 and NO_X emissions.

Noise protection measures

In the interests of both our employees and neighbours, we aim to minimise noise emissions at our locations. We regularly measure noise levels both within and beyond our sites and improve ratings where appropriate by installing sound buffers, for instance. If we receive complaints about noise, we systematically follow these up. Noise protection for our employees is an important aspect of occupational safety.

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ASSURANCE REPORT

¹ This value was changed from 300 to 236 tonnes after the publication of our previous report. The reason was a subsequent correction for one of our sites.