

Reduction of Other Air Pollutants:

- **Trees also remove other gaseous pollutants** by absorbing them with normal air components through the stomates in the **leaf surface**.
- Some of the **other major air pollutants** and their primary sources are:
 - **Sulfur Dioxide (SO₂)**- Coal burning for electricity/home heating is responsible for about 60 percent of the sulfur dioxide in the air. Refining and combustion of petroleum products produce 21% of the SO₂.
 - **Ozone (O₃)** - is a naturally occurring oxidant, existing in the upper atmosphere. O₃ may be brought to earth by turbulence during severe storms, and small amounts are formed by lightning. Most O₃ - and another oxidant, peroxyacetyl nitrate (PAN) - come from the emissions of automobiles and industries, which mix in the air and undergo photochemical reactions in sunlight. High concentrations of O₃ and PAN often build up where there are many automobiles.
 - **Nitrogen oxides** - Automotive exhaust is probably the largest producer of NO_x. Oxides of nitrogen are also formed by combustion at high temperatures in the presence of two natural components of the air; nitrogen and oxygen.
 - **Particulates** are small (<10 microns) particles emitted in smoke from burning fuel, particular diesel, that enters our lungs and cause respiratory problems.
- There is up to a **60% reduction in street level particulates** with trees
- In **one urban park** (212 ha.) tree cover was found to **remove daily** 48lbs. particulates, 9 lbs nitrogen dioxide, 6 lbs sulfur dioxide, and 2 lb carbon monoxide (\$136/day value based upon pollution control technology) and 100 lbs of carbon.
- **One sugar maple** (12" DBH) along a roadway **removes in one growing season** 60mg cadmium, 140 mg chromium, 820 mg nickel, and 5200 mg lead from the environment.
- Planting trees and expanding parklands improves the air quality of Los Angeles county. **A total of 300 trees can counter balance** the amount of **pollution one person produces in a lifetime**.

From: **Benefits of Trees In Urban Areas**

<http://www.coloradotrees.org/benefits.htm#carbon>