

## **Reducing Indoor Air Pollution to Combat Climate Change**

(submitted by Jennifer Dawson)

Concentrations of certain volatile organic compounds found in household products and building materials are 2 to 5 times higher indoors than outdoors. Moreover, indoor sources of these volatile organic compounds contribute to about [50% of total man-made VOCs](#) in the atmosphere. VOCs are harmful chemicals that vaporize at room temperature and react with nitrogen oxide in the air to produce tropospheric ozone, which traps radiation at low atmospheric levels. Taking steps to reduce VOC emissions and improve indoor quality is vital for [reducing greenhouse gases in the atmosphere](#). So what can you do?

### **Become a Conscientious Consumer**

Take time to read the back of your favorite shampoo or the dish soap next to your sink, and do some [investigating into the effects](#) of some of the more dubious ingredients. Formaldehyde, benzene, ethylene glycol, methylene chloride and xylene are just a few examples of VOCs that are typically found in most homes across the United States. Even when a harmful chemical itself is not used, the product may still contain other ingredients that release it. You'll notice that many products list "fragrance" or "parfum," which is a vague reference to over 3,100 different chemicals, many of which contain VOCs. Avoid any product containing fragrance, as these chemicals can have negative health and environmental impacts.

### **Look for VOC-free Alternatives**

Awareness is the first step in implementing real change. Once you've familiarized yourself with the ingredients you need to avoid, you'll need to find alternatives. You may choose to forego commercial products and [take a DIY approach](#), substituting VOC-free ingredients like baking soda, vinegar and lemon juice to clean your home instead. With increasing efforts towards a more sustainable planet, you'll be able to also find a number of low VOC products sold in stores.

When choosing store-bought products, pay attention to specific claims, rather than generic branding terms like "organic" and "natural." Environmental not-for-profits offer green and eco-friendly certifications for commercial products to help consumers make better choices. These labels serve as a guide, however, it is still important to do your own research.

## Utilize Air Purification Devices

The effects of climate change may impair the functioning of older buildings, and additional steps may need to be taken to protect your home's air quality. Air purifiers, HEPA filters, humidifiers and houseplants are just a few of the many resources available to achieve cleaner air. Air purifiers are capable of removing VOCs, dust and mold from the environment.

Waterfalls are one of nature's best air purifiers, as they emit [negative ions that bond with particulate matter](#) in the air and weigh it down to remove it from the atmosphere. An indoor water feature can provide the same effects in your home [as a waterfall would in nature](#). Regulating your home's humidity levels is also important for preventing the buildup of harmful organic compounds, such as mold and dust.

With the earth growing warmer every year, older adults have a responsibility to take every step possible in creating a more sustainable planet for future generations. Reducing VOCs and other sources of indoor air pollution helps manage levels of greenhouse gases globally. Make it your priority to limit your use of harmful chemicals and use air purification devices, along with other efforts to control climate change.