

Do you have a wood stove?

- then you can easily align with the green transition

If you replace firewood with cleaner heat, you contribute to:

- Fewer adverse health effects
- Less global warming
- Higher biodiversity

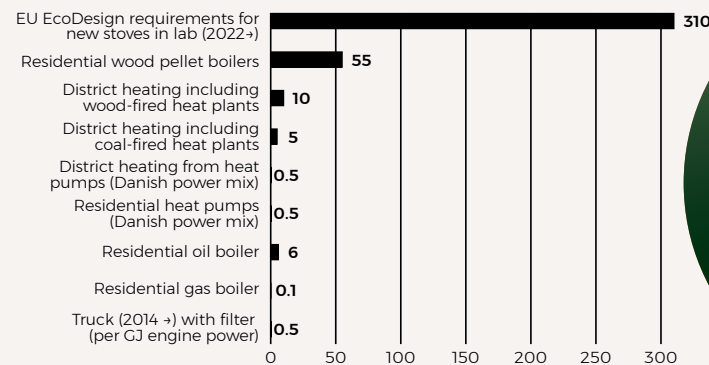
Great health benefits

Unfortunately, wood stoves emit much more harmful pollution than other heat sources. No matter how well you light a fire in a good new wood stove, the stove will emit a high number of the same health hazardous and carcinogenic pollutants as found in cigarette smoke. Not only will the air in your residential area be polluted, but your wood stove may pollute the air inside your house to very high levels as well. Hence, you can reduce the risk of morbidity in your family and among your neighbours simply by changing to cleaner heat.

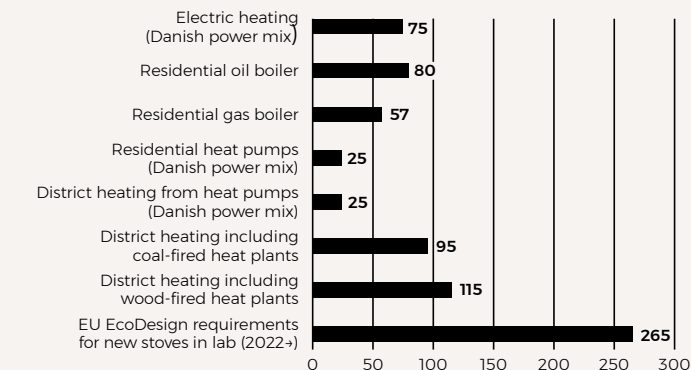
Reduced climate impact

Living as well as dead wood is an important CO₂ storage of nature. If you burn wood, CO₂ is immediately released and thereby creates the exact same global warming as CO₂ released from burning coal. It takes many decades for new trees to take up the emitted CO₂ – just count the tree rings in a piece of firewood. In addition, wood stoves emit soot particles, which also contributes significantly to global warming. Particularly, new wood stoves emit a high amount of soot particles.

Fine particle emissions from Danish heat sources compared to trucks (g particles per GJ heating)



Global warming (kg CO₂-e per GJ, GWP 20)



Wood stoves are cosy. Unfortunately, the pollution is alarmingly high.

There are great benefits for public health, the climate, and nature by leaving wood unburned.

Help nature

Dead wood must re-enter the natural cycle. It is an important part of both the food web and as habitat or hideout for many animals in nature. Therefore, instead of burning wood, you can e.g. stack wood in a corner of the garden. The stack can house hedgehogs, toads, insects, and many other animals that have difficulty in finding good habitats in our residential areas.



An electric fireplace provides the exact same cosiness without creating any local pollution.

Many folks use their wood stove as they are ignorant of the harm caused by wood smoke.

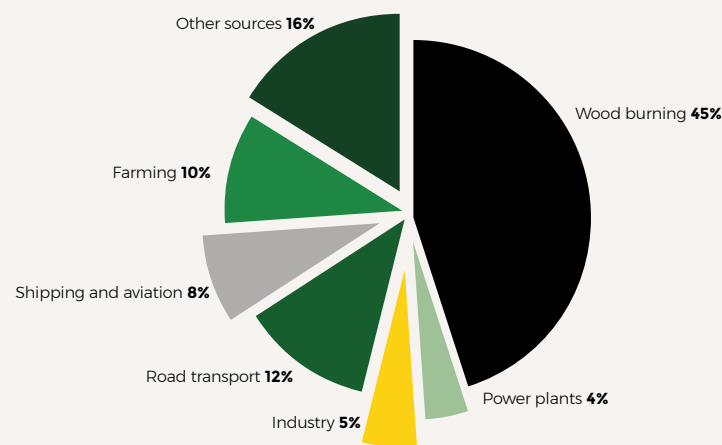
A simple calculation

A wood stove fulfilling the newest Ecodesign requirements (in 2022) emits around 5 g of particles per kg wood burned during optimal laboratory settings. The World Health Organisation's new air quality limit for particulate matter is 0.000000005 g per litre of air. Hence, 1,000,000,000 litre of clean air will be polluted to the limit when just 1 kg of wood is burned.

Expensive pollution

In most EU states, smoke from wood burning causes more particle pollution than emissions from traffic. Wood smoke increases the risk of cardiovascular diseases, blood clots, strokes, cancer, and severe respiratory disorders such as COPD, bronchitis, and asthma. Wood smoke is thereby a huge economic burden for society despite that wood burning only covers a small percentage of the energy consumption. And, obviously, in this day and age, we can live without burning off wood.

Danish particle emission



Warmth and cosiness

Fortunately, there are many alternatives to wood burning: Energy renovation lowers the heat consumption and increases the comfort in and the value of your house. District heating and heat pumps do not emit harmful smoke in residential areas. Having a modern electric fireplace provides the cosy atmosphere without emitting any health hazardous pollution. Most people can create a cosy atmosphere without the need of fire.

Our work

Green Transition Denmark is working for zero emission heat, i.e. heat produced from centralised and decentralised heat pumps, geothermal energy, waste heat from industry, etc. Our vision is to have smoke-free residential areas where children can play in the garden without inhaling toxic smoke.

Information

The green transition will only succeed if we all make an effort. The solution is a continuous flow of information about wood smoke, as no one intentionally wishes to harm their family, neighbours, the climate, or nature. Help spread the message to achieve more awareness so people change to clean heat sources.

More information

Green Transition Denmark:
https://rgo.dk/wp-content/uploads/GTD_Pollution-from-wood-burning_2022.pdf
EU project Clean Heat:
<https://www.clean-heat.eu/en/home.html>
Doctors and Scientists Against Wood Smoke Pollution:
<https://woodsmokepollution.org/>

By joining Green Transition Denmark you actively support our efforts for clean air – read more at <https://rgo.dk/frontpage-english/air-pollution/>



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DENMARK

Green Transition Denmark receives funding from the European Climate Foundation and Birdlife Europe to reduce wood burning for the benefit of public health, the climate and biodiversity.