THE HIDDEN CLIMATE IMPACT OF ELECTRONICS:

F-GHGs

Many popular electronics contain liquid crystal display (LCD) panels.

Every time these are made, potent fluorinated greenhouse gases, or F-GHGs, are emitted into the atmosphere.

HERE'S THE LOWDOWN:

Greenhouse gases:

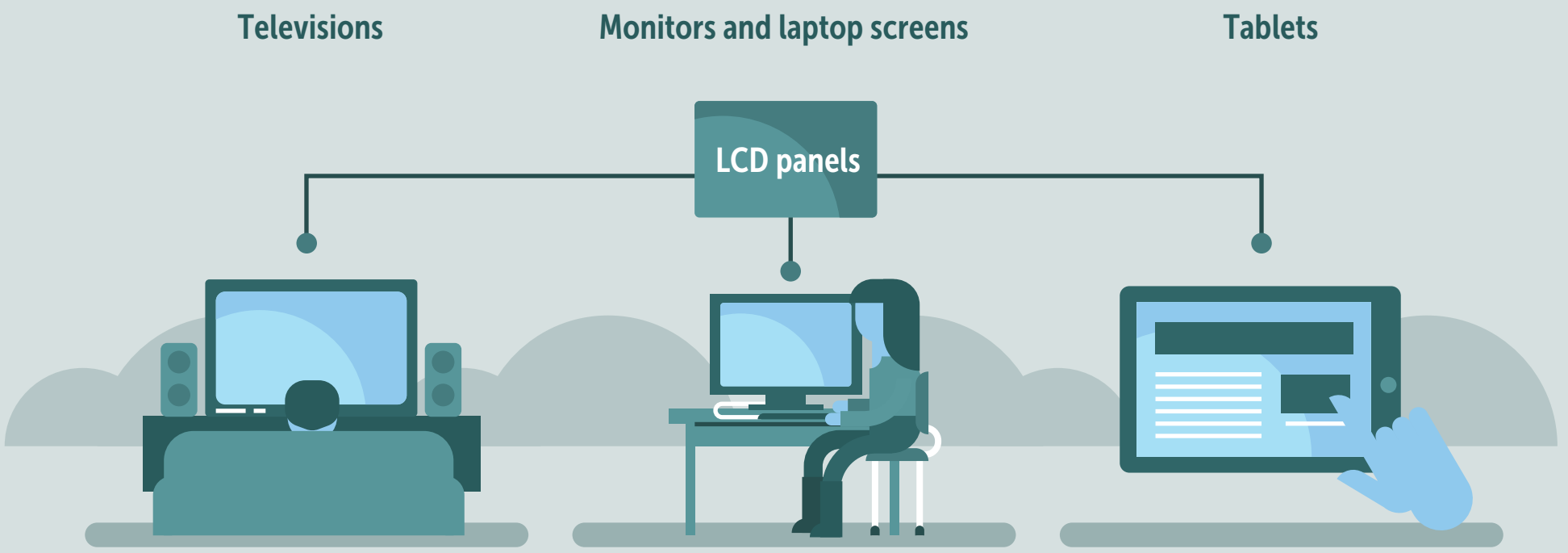
- trap heat in the atmosphere and cause it to warm
- change the Earth's climate and harm ecosystems
- result in dangerous effects to human health and the environment

CARBON DIOXIDE (CO_2) IS THE MOST COMMON GREENHOUSE GAS, BUT THE F-GHGS USED TO PRODUCE LCD PANELS ARE THOUSANDS OF TIMES MORE POTENT THAN CO_2.

Key F-GHGs used in LCD panel manufacturing:

- SF_6 = **23,000 TIMES** MORE HEAT-TRAPPING THAN CO2
- NF_3
- PFCs
- HFCs

F-GHGs are released during the manufacturing process that produces flat panel displays- one of the first steps in assembling final products like:

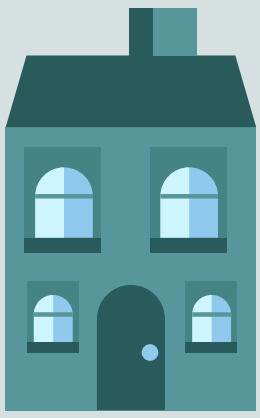


F-GHG EMISSIONS ARE EXPECTED TO GROW

based on projected growth in consumer demand of LCD flat panel displays.

Currently emissions are expected to grow by

Over 2 $MtCO_2e$* **in 2015** = to the emissions from approximately **280,000** homes' electricity use.



Over 7 MtCO2e* **in 2020** = to the emissions from approximately **1,000,000** homes' electricity use.

*Million metric tons of carbon dioxide equivalent

While some suppliers are working to reduce their F-GHG emissions, more needs to be done.

BRANDS, RETAILERS AND LARGE PURCHASERS HAVE THE POWER TO INFLUENCE REDUCTIONS IN F-GHG EMISSIONS

by ensuring their products are made with flat panels from suppliers who are curbing emissions.

See **www.epa.gov/climateleadership/supplychain/sector.html** to learn more.

EPA United States Environmental Protection Agency

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