

# 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<sub>2</sub>) IS THE MOST COMMON GREENHOUSE GAS, BUT THE F-GHGS USED TO PRODUCE LCD PANELS ARE THOUSANDS OF TIMES MORE POTENT THAN CO<sub>2</sub>.**

*Key F-GHGs used in LCD panel manufacturing:*

▶ SF<sub>6</sub> = **23,000 TIMES** MORE HEAT-TRAPPING THAN CO<sub>2</sub>

▶ NF<sub>3</sub>

▶ PFCs

▶ HFCs



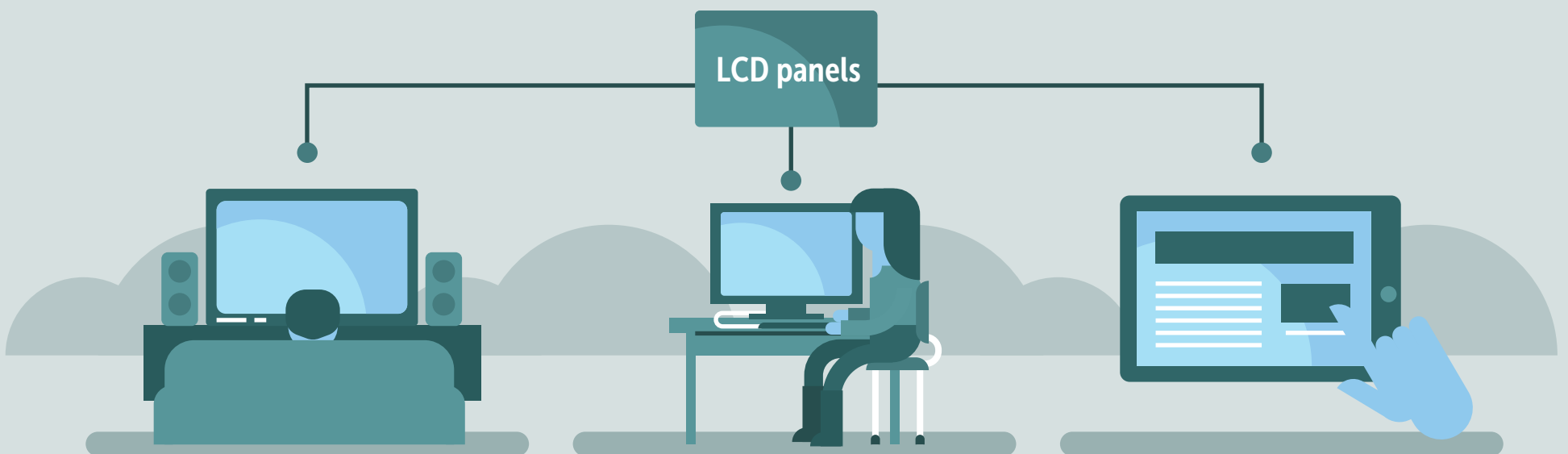
F-GHGs are released during the manufacturing process that produces flat panel displays- one of the first steps in assembling final products like:

Televisions

Monitors and laptop screens

Tablets

LCD panels



## 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<sub>2</sub>e\* in 2015 = to the emissions from approximately **280,000** homes' electricity use.



Over 7 MtCO<sub>2</sub>e\* 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](http://www.epa.gov/climateleadership/supplychain/sector.html) to learn more.