

F-GHG Emissions Reduction Efforts: Flat Panel Display Supplier Profiles

Summary

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The [Supplier Profiles \(PDF\)](#) detail the efforts of large-area flat panel suppliers to reduce their F-GHG emissions in manufacturing across key areas. They cover mitigation measures and goals, the extent of reduction efforts (whether they include all processes and gases used), the extent to which abatement technologies are installed on newer generation fabs that make current large-area panels, and public disclosure efforts.

Currently, there are twelve suppliers that constitute the major producers of large-area flat panel displays used to make TVs and display products. To summarize:

[AU Optronics \(AUO\)](#): Reduced nearly 6.94 million metrics tons of CO₂e from 2003-2011 by installing abatement systems on all newer generation fabs. AUO reduces F-GHG emissions from all etch and clean processes, targeting SF₆, PFCs, HFCs and NF₃. AUO has been participating in the Carbon Disclosure Project since 2007 and most recently reported its F-GHG emissions for 2011.

[BOE Technology](#): Information on its F-GHG reduction efforts in flat panel manufacturing is currently unknown. BOE Technology has participated in the Carbon Disclosure Project and general information on its broader GHG emissions management efforts is publicly available.

CEC-Panda: Information on its F-GHG reduction efforts in flat panel manufacturing is currently unknown.

ChinaStar: Information on its F-GHG reduction efforts in flat panel manufacturing is currently unknown.

[Chunghwa Picture Tubes \(CPT\)](#): Reduced an estimated 24 million tons of CO₂e from 2002-2011 by installing abatement systems on all newer generation fabs. CPT reduces F-GHG emissions from all etch and clean processes, targeting SF₆, PFCs, HFCs and NF₃. CPT has publicly reported that F-GHG emissions accounted for 24 percent of the company's F-GHG emissions in 2011.

[HannStar](#): Reduced approximately 1.23 million tons of F-GHG emissions from 2005-2011 by installing abatement systems on all newer generation fabs. HannStar reduces F-GHG emissions from all etch and clean processes, targeting SF₆, PFCs, HFCs and NF₃. HannStar has publicly reported F-GHG emissions from one of its fabs, most recently for 2009.

Infovision: Information on its F-GHG reduction efforts in flat panel manufacturing is currently unknown.

[INX \(Innolux, formerly CMI\)](#): Has reduced its F-GHG emissions by installing abatement systems on all newer generation fabs. In 2010, INX exceeded its reduction goals to where emissions intensity amounted to 0.00094 tons of CO₂e/m² of glass substrate and, in 2011, INX further reduced emissions intensity to 0.0082 tons of CO₂e/m². INX reduces F-GHG emissions from all etch and clean processes, targeting SF₆, PFCs, HFCs and NF₃. INX participates in the Carbon Disclosure Project and most recently reported its F-GHG emissions for 2011.

[LG Display](#): Reduced over 8 million metric tons of CO₂e in 2012 and has installed F-GHG abatement systems on all lines of CVD tools and on three lines of etch tools in its newer generation fabs. Its reduction efforts target SF₆, PFCs, and NF₃ (LG Display does not use HFCs). LG participates in the Carbon Disclosure Project and most recently publicly reported its F-GHG emissions for 2010. LG reported its F-GHG emissions and emissions reductions for 2011 and 2012 for purposes of this profile.

[Panasonic](#): Has reduced its F-GHG emissions by installing abatement systems on all newer generation fabs. Panasonic reduces F-GHG emissions from all etch and clean processes, targeting SF₆, PFCs, HFCs and NF₃. Panasonic participates in the Carbon Disclosure Project and reported its F-GHG emissions from one of its fabs for its 2012 fiscal year for purposes of this profile.

[Samsung Display](#): Has reduced over 1 million tons of CO₂e so far and has installed F-GHG abatement systems on all lines of CVD tools and on some lines etch tools in its newer generation fabs. Its reduction efforts target SF₆, PFCs, HFCs and in some manufacturing lines, NF₃. Samsung Display participates in the Carbon Disclosure Project and most recently reported its F-GHG emissions for 2011.

[Sharp](#): Has reduced its F-GHG emissions by installing abatement systems on all newer generation fabs. Sharp reduces F-GHG emissions from all etch and clean processes, targeting SF₆, PFCs, HFCs and NF₃. Sharp participates in the Carbon Disclosure Project and most recently reported its F-GHG emissions for 2011.

This summary reflects information as it appears in each supplier's profile, which was assembled from publicly available sources and information provided by suppliers. Profiles will be updated as new information becomes available.