reduction in fuel burn, delay, or flight operations), a brief statement describing the factual basis for this conclusion is sufficient.

- Where the proposed action or alternative(s) would result in an increase in GHG emissions, the emissions should be assessed either qualitatively or quantitatively as described below.

Moreover, the guidance points out there are currently no federal requirements for reporting GHG emissions from aviation sources as well as no significance thresholds. Therefore, the FAA recommends the following with respect to assessing and reporting GHGs in NEPA documents:

- When there is reason to quantify emissions, GHG emission inventories should be reported in metric tons of carbon dioxide equivalents (MT CO_{2e}).[66]
- GHG emissions should be based on fuel burn, energy usage and/or activity levels developed from FAA-approved tools.
- CO_{2e} should be computed for time periods that are reasonably foreseeable using the same analytical timeframes used for the NEPA analyses.
- CO_{2e} results should be documented in a separate section of the NEPA document distinct from air quality, under a heading labeled "Climate".
- CO_{2e} emissions should be reported in a table or similar format that compares the project/action and/or alternatives to the no-action alternative (i.e., the incremental change) within the same timeframe.
- For an air traffic action, the CO_{2e} should be computed based on the fuel content and the assessment boundary shall be the same as the study area.
- For an airport action, the GHG assessment should include the same emission sources that would typically be included in an air quality analysis – with a particular focus on those emission sources affected by the project/action.
- For aircraft, the altitude up to which GHG emissions would be quantified should be 3,000 feet. For non-aircraft sources, GHGs should be determined from fuel burn, energy usage, and/or activity levels.

Therefore, in those cases where the project/action would not increase GHG emissions, this finding should be stated and no further explanation is required. In those cases where GHGs are shown to increase with the project/action and quantification is warranted, **Section 6.3.4** (*GHG Emission Inventory Methods*) provides recommended methodologies.

Finally, in those cases where GHG emissions are not quantified (i.e., because other air emissions and/or fuel burn are not quantified), FAA suggests that the potential impacts can be expressed semi-qualitatively. For example, given that all U.S. aviation represents less than three percent of U.S.-based GHG emissions, then it can be concluded by proportion, that the percent contribution

[66] EPA defines CO_{2e} as a metric measure used to compare the emissions from various GHGs based upon their GWP. CO_{2e} are commonly expressed as "metric tons of carbon dioxide equivalents ($MTCO_{2e}$)." The CO_{2e} for a gas is derived by multiplying the tons of the gas by the associated GWP.