Summary of Updates to WHO Benefits of Action to Reduce Household Air Pollution (BAR-HAP) Tool

This file briefly summarizes the updates made to the BAR-HAP tool since the original version was released in July 2021. The basic functions remain very similar.

March 6 2022 version:

Data and model structure changes:

- Country-specific emissions data for electricity generation have been integrated into the calculations of emissions implications of electric cooking. These data account for CO₂, CH₄ and N₂O emissions from electricity generation.
- Added an option to model scenarios at urban or rural levels (in addition to the national level), by accounting for the different fuels used at baseline in urban and rural areas.
- The annual costs now include net fuel costs, whether these are positive or negative. Therefore, a "negative" cost amount indicates that net fuel costs are negative, in other words, that there are fuel cost decreases from a particular transition scenario.

Fixing of calculation errors:

- Several cell reference errors were fixed regarding the annual benefit numbers.
- Corrected a programming error in the behavior change campaign intervention for transitions to LPG.
- Updated the calculation of annualized administrative costs (government costs) to fix an error in the formula that did not properly account for discounting.

Other (cosmetic) changes:

Minor formatting changes in the user interface.