

Nexleaf Impact Metrics Calculation Explanations – Updated November 2017

We calculate the number of babies born each year receiving vaccines protected by ColdTrace using population data, birth rate data, and immunization rates. We include the vaccinated newborn populations in our metrics only when ColdTrace is fully implemented at the health clinic level across an entire state or province. This statistic is therefore a conservative estimate and does not include the populations of locations where ColdTrace provides supplemental protection for large central vaccine stores. The dollar value of the vaccines ColdTrace protects each day, however, **does** include instances where ColdTrace is helping safeguard national and provincial vaccine stores. At the health clinic level, ColdTrace protects **people** and **assets**. At higher levels in the health system, ColdTrace protects **assets**. Stats on number of devices deployed and countries with active deployments come from our installation records and our ColdTrace data dashboard. Devices that have sent data in the 60 days prior to each impact metric update are counted as active.

StoveTrace cooking hours are taken from the StoveTrace data dashboard and include all StoveTrace implementations since the Climate Credit Pilot Project (C2P2) started. C2P2 was a Project Surya program that began with the first installation on September 1, 2014 and concluded on April 30, 2016. This program utilized Sensor-enabled Climate Financing, or the SCF model, to expand clean energy access. Based on a data audit completed in August 2017, the final impact number for C2P2 are: 650 households; 382.62 tons of CO₂e mitigated; 141,640 hours of cooking monitored; and \$2295.72 disbursed to women for clean cooking.

Our StoveTrace impact metrics, including the number of households, tons of CO₂e mitigated, hours of cooking monitored, and amount of money disbursed to women for clean cooking, are **cumulative**. The updated numbers include all ongoing SCF interventions, completed stove testing interventions, and partner interventions.

CO₂e, or carbon dioxide equivalent, is a standard unit expressing emissions in terms of an equivalent amount of carbon dioxide. We use CO₂e in order to sum the global warming potential of both the CO₂ and the black carbon emissions mitigated by clean cooking. Learn more about the theoretical underpinnings of CO₂e as agreed upon by the world's leading climate scientists here:

https://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html

We calculate the number of miles using the EPA calculator here:

<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

To learn more about black carbon, visit:

<http://www.nature.com/ngeo/journal/v1/n4/full/ngeo156.html>

If you'd like additional clarification on these numbers, please contact us at info@nexleaf.org.