# **Toshiba Carbon Impact Report**



## **Carbon Impact Report**

Client: Lanier South West

Total CO2 Prevented: 0.97 tonnes

| Model          | Number of Machines |
|----------------|--------------------|
| e-STUDIO3525AC | 1                  |

## **Kenya Stove Project Impacts**

| Impact Sector       | Impact  | Quantitative Data <sup>1</sup> |
|---------------------|---|--------------------------------|
| Environment         | Wood Saved  | 0 tonnes <sup>3</sup>          |
|                     | Area protected  | 0 acres                        |
|                     | Number of stoves  | 0                              |
| Social              | Time Saved  | 6.71 hours                     |
|                     | Children Impacted   | 0                              |
|                     | Elderly People Impacted   | 0                              |
|                     | Total People Impacted   | 1                              |
| Economic            | Working Time Saved  | 6.71 hours                     |
|                     | Working Days Equivalent   | 0.8 working days               |
|                     | Likely reduced cases from project support                               |                                |
| Health <sup>2</sup> | Respiratory Illness (Lower Chest / Lung)                                | 0                              |
|                     | Asthma  | 0                              |
|                     | Ear, Nose and Throat Irritation   | 0                              |
|                     | Total reduced instances of serious illness attributable to indoor smoke | 0                              |

#### **Uganda Borehole Project Impacts**

| Impact Sector | Impact                             | Quantitative Data        |
|---------------|------------------------------------|--------------------------|
| Environment   | Wood Saved                         | 0.23 tonnes <sup>3</sup> |
| Social        | Infants (<5) Impacted              | 0 4                      |
|               | Adults Impacted                    | 0                        |
|               | Children Impacted                  | 0                        |
|               | Total People Impacted              | 0                        |
| Health        | Clean Water Supplied               | 0 litres <sup>3</sup>    |
|               | Likely cases of Diarrhoea avoided  | 0 5                      |
|               | Likely cases of Fatalities avoided | 0                        |

#### **Brazilian Forestry Project**

| Impact Sector | Impact                         | Quantitative Data       |
|---------------|--------------------------------|-------------------------|
| Environment   | Brazilian Rainforest Protected | 1 hectares <sup>6</sup> |
|               | Equivalent in meters           | 3 meters                |
|               | Equivalent number of trees     | 13 trees <sup>7</sup>   |

<sup>&</sup>lt;sup>1</sup> The data from the Impacts are based on the field work carried out by CO2balance within the project locations in Kenya and Uganda. The data that is gathered is in line with the requirements of the Gold Standard as part of the annual Monitoring. These Monitoring Reports are available on request. Data is then cross compared against national averages in Kenya and Uganda to ensure accuracy. Assumptions and extrapolations have been used where relevant.

<sup>&</sup>lt;sup>2</sup> The Health Data is derived from the following sources R. Perez-Padilla et al, 2010. 'Respiratory health effects of indoor air pollution' in International Journal of Tuberculosis and Lung Disease, vol. 14 no. 9, pp1079-1086. Kenya National Bureau of Statistics. (2008). Kenya Integrated Household Budget Survey. Ministry of Planning and National Development, p1-300.

<sup>&</sup>lt;sup>3</sup> Wood saved and clean water supplied - Calculations based on field measurements conducted by staff contracted to CO2balance and are conducted according to the requirements defined by the Gold Standard. Monitoring data is available on the Gold Standard registry.

<sup>&</sup>lt;sup>4</sup> People Impacts - Calculations based on field measurements conducted by staff contracted to CO2balance and survey data from the Uganda Bureau of Statistics.

<sup>&</sup>lt;sup>5</sup> Health Impacts - Calculations based on number of diarrhoea incidences per 1000 people recorded in Northern Uganda reported by Barungi & Samp; Kasirye, 2011 and the reductions in diarrhoea and diarrhoea fatalities expected after installing a borehole reported by the World Health Organisation.

<sup>&</sup>lt;sup>6</sup> The data and calculation methodology is derived from the following sources: US Environmental Protection Agency (2016), GHG Equivalencies Calculator - Calculations and References, retrieved from https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references#seedlings and Florestal Santa Maria S.A., Monitoring Report, retrieved from http://www.vcsprojectdatabase.org/#/project\_details/875

<sup>&</sup>lt;sup>7</sup> The data is derived from the following source: Trees for the Future (n.d.), How to calculate the amount of CO2 sequestered in a tree per year, retrieved from https://www.broward.org/NaturalResources/ClimateChange/Documents/Calculating%20CO2%20Seque stration%20by%20Trees.pdf