



TOSHIBA CARBON ZERO SCHEME

UN Sustainable Development Goals

- > The UN has 17 measurable Sustainable Development Goals (SDGs), several of which are supported by the Toshiba CarbonZero scheme. This report focuses on **SDG 13: Climate Action**, explaining the impact of the Toshiba Carbon Zero Scheme and its link to this goal.
- > SDG 13 is aiming to support all countries to implement measures to reduce their CO₂ emissions, whilst improving public knowledge of the issue and help countries cope with or avoid climate-related shocks. These measures are essential to help countries adhere to their 'nationally determined contributions', according to the Paris Agreement.
- > The Toshiba CarbonZero Scheme supports the ongoing activities to rehabilitate and maintain boreholes in Uganda. These are mainly boreholes which have fallen into disrepair, denying communities access to safe water and forcing people to burn firewood in order to boil water to make it safe, thereby contributing to CO₂ emissions.

FACTS

- > 2016 was hottest year on record, with average global temperatures 1.1 degrees higher than pre-industrial levels. In combination with El Niño weather conditions, these high temperatures contributed to major droughts, causing disastrous food shortages throughout sub-Saharan Africa and around the world.
- > 2016 also saw atmospheric CO₂ levels reach their highest level on record of 400 parts per million, whilst global sea ice fell to its second lowest level of record of 4.14 million km².
- > Following the Paris Agreement, Uganda has pledged a 22% reduction in its national-level CO₂ emissions compared to the business-as-usual projection by 2030.

Ugandan Borehole Case Study

Okar village is in Kole district in Uganda's Northern Region. It has a population of over 400 people spread across 90 households and is served by the borehole rehabilitated by CO2balance under the Toshiba CarbonZero scheme.

William Otyang lives just 50 metres away from the borehole with his wife and children and notes the dramatic impact it has had on his family: *"The water yield from the borehole is very high and it is very reliable as a water source. The water user committee come and close the borehole in the night but we welcome that because we know that they do it so that the borehole doesn't run out of water. It's very convenient to have the water source for collecting water and we are happy to be able to collect water any time in the day without fear that the well will be dry."*

In addition to the benefit of a secure water supply, William pointed out how his family's consumption of firewood has now decreased because they are guaranteed a full-time safe water supply so do not need to worry about boiling their water in order to make it safe. This has saved the family a vast amount of time on gathering firewood which, along with the time saved on collecting water, has allowed William to devote himself full-time to farming chilli and soya beans, providing vital nutrition for his children and valuable income from sales at the local market.



Crucially, the reduced need to boil water in order to make it safe has allowed the family to dramatically reduce their CO₂ emissions through burning biomass. Users like William have also been sensitised by the borehole maintenance committee on the need to plant more trees in the vicinity of the borehole and community as a whole. This helps to remove pollutants from the soil and also improves its water retention, thereby improving the recharge capacity of the borehole and ensuring that it remains a reliable water source. Additionally, this work to plant and conserve trees also improves carbon sequestration and helps the community to make a positive impact to mitigating climate change whilst also preserving its own water supply for the long term.

Toshiba's contribution to the UN Sustainable Development Goals

This case study shows how the project activities in Uganda contribute to SDG 13 in the following ways:

- The project removes the need for households to boil water in order to make it safe, thereby removing the necessity of burning copious volumes of firewood and thus reducing CO₂ emissions.
- Planting trees to help watersheds additionally sequesters CO₂ from the air and allows the community to contribute to global climate change mitigation whilst preserving its own water supply.

For more information about the Toshiba Carbon Zero Scheme please visit our website:
www.toshibatec.eu/about/sustainability/carbon-zero/

In cooperation with



Toshiba Tec Germany Imaging Systems GmbH

Carl-Schurz-Str. 7
41460 Neuss
Germany

Website
www.toshibatec.eu