

# TOSHIBA

## Carbon Zero Scheme

At Toshiba we are committed to the environment. With the help of carbon offsetting experts CO2balance we have created a scheme which enables us to help combat CO<sub>2</sub> emissions through the offsetting of all our products.



# What is Toshiba Carbon Zero?

Working together with carbon offsetting experts CO2balance, Toshiba have created a scheme which enables us to help combat CO<sub>2</sub> emissions through the offsetting of all our products from procurement to delivery and beyond.

Carbon offsetting allows for the investment in projects that save the emission of, or absorb an equivalent amount of CO<sub>2</sub> to that of any Toshiba product's footprint. Through this process emissions are balanced to become 'Carbon Zero' which allows for positive business activities with no detrimental effect to the environment.

## Why Carbon Zero?

Toshiba has a long history of innovation including environmental awareness with all of its products. During design and manufacturing Toshiba makes every effort to reduce the environmental impact of its activities. However there are always some unavoidable carbon emissions from the manufacture and operation of its products. The Carbon Zero scheme seeks to minimise the lasting impact of our products as well as to provide support to communities in developing countries.

# The Projects

We are proud to be supporting a number of projects:

## African Energy Efficient Stoves

This project supplies energy saving cook stoves to villages in Kenya, which result in a reduction in the usage of firewood by up to 50%. The stoves therefore yield a saving in timber use, carbon emissions, smoke, time and cost, improving the lives of the host communities.

## Kenyan Mangrove Reforestation

By replenishing lost or destroyed mangrove forests along the Mombasa Estuary this project helps to re-develop valuable eco-systems both on and off-shore. As well as mitigating considerable levels of CO<sub>2</sub>, the forests provide a valuable source of income to locals.

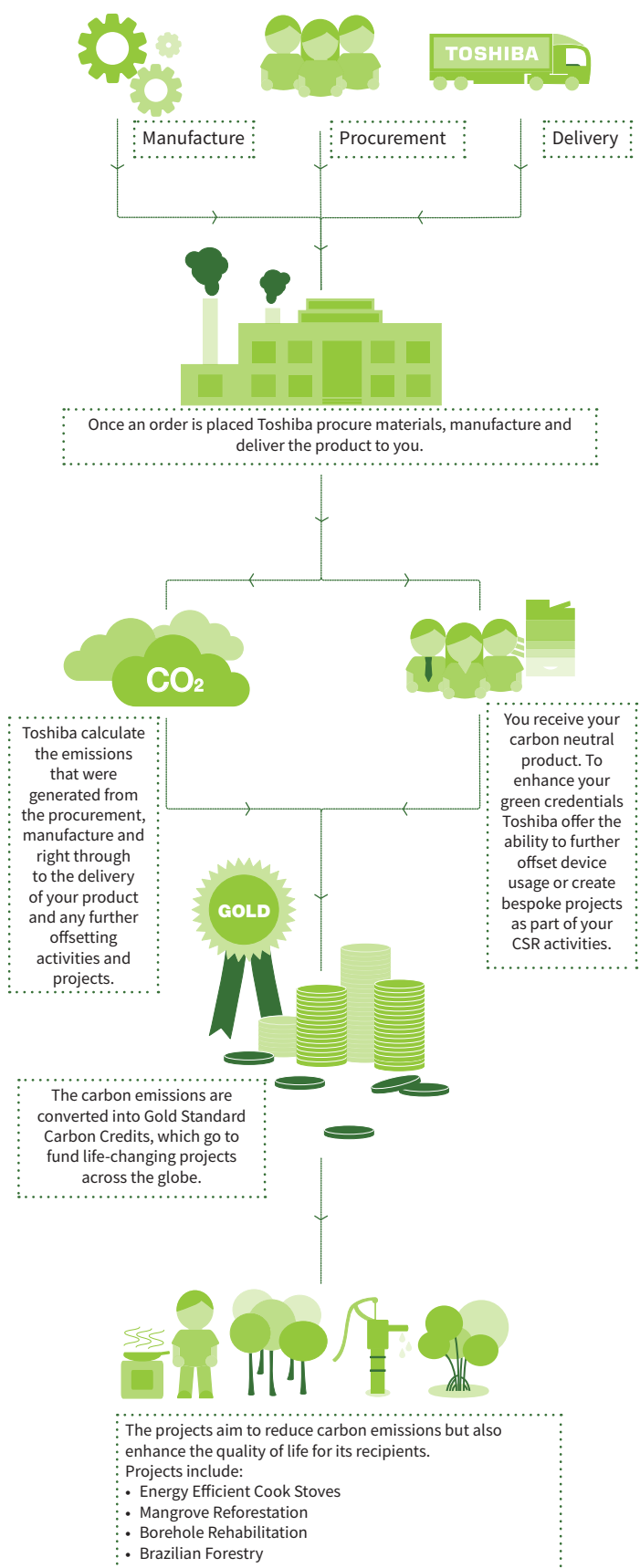
## Ugandan Borehole Rehabilitation

By renovating and repairing boreholes in remote villages across Uganda this project helps to restore a safe clean source of drinking water for families. As well as the natural health benefits, not having to boil the water, reduces the amount of firewood consumed and creates a carbon reduction.

## Brazilian Forestry Project

Actively protecting over 71,714 hectares of Amazon Rainforest through educating locals and patrols, the Brazilian Forestry project enables the rainforest to continue to act as a sponge absorbing CO<sub>2</sub> and protecting wildlife.

# How We Do It



## Case Studies

### Case Study: Mangrove Forest

The Mangrove Reforestation Project has seen the regeneration of large areas of mangrove forests that have been lost through harvesting, changing climates and land clearance for farming and tourism.

With more than 35% of the world's mangroves already gone, mangrove forests are one of the world's most threatened tropical eco-systems. However, these forests play an essential part in the global eco-system: from land preservation to farming and high-level carbon mitigation.

The project consists of the replanting of mangrove saplings along the banks of the Mombasa Estuary that provide a valuable eco-system on and off-shore. Alongside planting of saplings, an education programme has been developed for locals to encourage preservation and sustainable use of the forests resources.

The replanting of mangroves has:

- | Helped in the mitigation of a considerable amount of CO<sub>2</sub>.
- | Provided protection of current environments from coastal erosion.
- | Improved fishing opportunities through providing a safe environment for a large variety of fish species, crab, shrimp and molluscs.
- | Provided a source of strong timber and plant products. As mangrove wood is resistant to rot and insects it is extremely valuable to locals.
- | Encouraged local habitats to develop, such as African Bees that provide honey for harvesting.

### Case Study: Mr Omar - Energy Efficient Stoves

One of our most successful projects with the Toshiba Carbon Zero Scheme has been the provision of energy efficient stoves throughout some of the poorest regions in Africa.

The stoves, developed to replace the traditional 3 stone cooking method, provide a more effective and efficient solution. Significantly reducing the amount of firewood consumed whilst cooking which in turn dramatically cuts the levels of CO<sub>2</sub> emissions. The stoves are also affecting recipients and other communities in a positive way, improving the health of users, reducing the amount of income required for the purchase of firewood and freeing up time for additional income generating activities.

Mr Omar's story provides an insight into the improvements CO<sub>2</sub>balance stoves are making every day:

Since the installation of his stove Mr Omar has seen a dramatic reduction in the smoke produced when cooking, thanks to the efficient burning of the stove.

The efficient use of wood and faster cooking times has allowed Mr Omar to undertake more paid work. Combined with additional savings made from the reductions in firewood purchases Mr Omar has been able to upgrade his home. Where he previously had a roof constructed from coconut leaves, Mr Omar now has been able to provide a tin roof which protects his family and his house much better.

**"The stoves are brilliant, I have been able to afford my new roof which is wonderful. I hope to make lots of improvements with the money I save from the CO<sub>2</sub>balance stove."** - Mr Omar





# FAQs

## Why carbon offset my device?

Carbon offsetting is part of an effective environmental plan. It is important wherever possible to reduce consumption of materials and energy as a priority. This not only helps in the fight against global warming but makes best use of resources and keeps costs down. Carbon offsetting can help further by reducing the release of Green House Gas such as Carbon Dioxide to the same value or greater than associated with the product that is being offset. At the same time however Carbon offsetting can assist developing communities such as those in our Energy Efficient Stoves Project by providing low carbon emission products and much needed assistance with basic energy requirements.

## How do we calculate the offset of a Toshiba product?

The lifecycle analysis of the product begins by assessing all of the materials used to manufacture our products. Throughout the design, production and distribution of Toshiba devices the Greenhouse Gas assessment is applied to determine a carbon footprint for each product. In addition, we take into account the carbon implications of the consumables, such as toner and paper consumed, as well as the energy requirements for servicing and operation of each device throughout its lifecycle. All the factors combine to give us a Carbon Footprint value expressed in Tonnes which is variable by product. To ensure we cover all eventualities we add a significant buffer figure to our average total.

## How can I tell if my Toshiba device has been offset?

All Toshiba devices that have been carbon offset are supplied with a sticker with the Carbon Zero logo on installation.

## I bought my Toshiba product before 2009, is there anyway I can offset it?

Yes, please contact your local Toshiba representative (there may be a small charge for this service).

## Can I choose to support other projects?

It is not possible to choose alternative projects to support within the Carbon Zero Scheme. However if you would like to discuss the possibility to measure the Carbon impact of your own business, product or service for the purpose of offsetting please contact us.

## Can I create a bespoke project?

Yes, working together with CO2balance and the Toshiba Carbon Zero project you can create bespoke programmes to fit with your CSR activities or unique events. Speak to your Toshiba representative to find out more.

## Why do you not have any projects in Europe?

All of our projects are selected from non Annexe one countries as defined under the Kyoto Protocol. This ensures that the projects help contribute towards sustainable social and economic development in some of the poorest countries and communities in the world. The projects all have a high degree of additionality, meaning they would not be able to happen without the benefit of Carbon financed initiatives and exist to reduce carbon emissions.

## How do you ensure that the projects are sustainable?

All of our projects are regulated by United Nations approved standards. We support projects that meet the Verified Carbon Standard (VCS) and the Gold Standard. These authorities grant carbon reduction credits to a project, only after extensive third party verification and strict scrutiny. A project has to pass these verification examinations annually.