

### Carbon offsetting projects for the 2018 FIFA World Cup™

FIFA and the LOC have committed to offsetting the emissions of the 2018 FIFA World Cup which cannot be eliminated entirely through verified low-carbon projects in Russia and projects from the United Nations "Climate Neutral Now" online platform for voluntary cancellation of certified emission reductions (CERs).

In total, FIFA and the LOC will offset 243,000 tonnes of carbon emissions, which is 11.2% of the total carbon emitted in the organising and staging of the event. This amount includes the direct and indirect emissions from scope 1 and scope 2, as well as emissions from scope 3 over which FIFA and the LOC have complete or partial operational control. In particular, this includes travel emissions of FIFA and LOC personnel, venue operational personnel, volunteers, teams, referees, and delegates.

In addition, FIFA and the LOC will also offset 16,547 tonnes of carbon emissions as a result of the climate action campaign for ticket holders (<a href="www.fifa.com/worldcup/climate-action">www.fifa.com/worldcup/climate-action</a>).

For more information on the carbon footprint of the 2018 FIFA World Cup, please also see the <u>2018 FIFA</u> World Cup Greenhouse gas accounting report.

#### **Biomass energy project, Russia**

More information available online

The low-carbon project near the city Sharya in the Russian province Kostroma replaces fossil fuels in a wood processing manufacturing plant with biomass, which therefore leads to a substantial reduction in the plant's greenhouse gas emissions. This is the only climate project in the Russian Federation which is qualified for the high-quality Gold Standard and has led to substantial social, economic and environmental improvements in the whole region.

Prior to the project, fossil fuels, namely peat and heavy oil, delivered the energy required by the manufacturing plant, while wood was only used as a productive input. Residues from wood processing were deposited in a dump near the factory. Due to anaerobic decay, this also led to the emission of methane, which is a more potent greenhouse gas than CO<sub>2</sub>.

The project reduces fossil fuel use by generating energy from biomass, mainly the wood residues

which are a side-product of the wood processing in the factory. Before the implementation of the project, the wood residues used to be deposited in a nearby dump. They are now used in the central biomass combustion plant to help meet the company's energy demand.

#### Hydroelectric project, India

Climate Neutral Now project number <u>1326</u>

The hydroelectric project was developed on the Rangit River (a tributary of the Teesta River, which is the main river traversing in Sikkim) in the state of Sikkim, India. The electricity generated displaces grid-sourced electricity that is dominated by non-renewable fossil fuel resources, thereby reducing the carbon intensity of the Eastern Regional Grid. Furthermore, the project will result in a reduction of airborne pollutants, such as oxides of nitrogen, oxides of sulphur, carbon monoxide and particulates, through a reduction in the combustion of fossil fuels.

## Palm oil wastewater treatment project, Thailand

Climate Neutral Now project number <u>3335</u>

1



The crude palm oil processing plant, located in Trang Province in southern Thailand, prevents wastewater from decomposing and generating methane, a greenhouse gas which contributes to global warming. Instead, the methane is used to generate electricity. Methane emissions are minimised and odour pollution reduced, which in turn contribute to the well-being of the community. In addition, this project also helps raise environmental consciousness among local agriculturists and surrounding communities.

#### Hydropower project, Brazil

Climate Neutral Now project number 8018

The objective of the low-carbon project is to provide electric power to the national grid, replacing the electricity generated from fossil fuels with electricity generated through renewable sources. Moreover, the installation of two hydropower plants helps to meet the growing energy demand on the Rio Grande do Sul state, to decrease the external energy dependency and contributes to environmental sustainability, as it increases the share of renewable energy in relation to the total consumption of electricity in Brazil.

#### Efficient cook stove programme, Kenya

Climate Neutral Now project number <u>5336</u>

The project is located in Kenya and provides locally made domestic fuel-efficient cooking stoves to rural households within the Mathira East, Eldoret East and Keiyo districts. The new stoves reduce the amount of wood fuel needed to cook with, thereby reducing carbon emissions.

The new fuel-efficient stoves replace the traditional "3-stone fires", which are thermally inefficient and create incomplete combustion and large amounts of smoke, as well as indoor air pollution. Indoor air pollution has been linked to a range of health problems, such as acute respiratory infections (ARI) in children, chronic obstructive lung diseases (such as chronic bronchitis and asthma), lung cancer and neonatal complications.

The stoves provide the families with a cleaner, cheaper and easier way of cooking, due to the reduction of wood. In addition to reducing carbon emission, this project is community-led, with all the stoves built in Kenya. The improved stoves reduce indoor air pollution and cooking and wood collection time, allowing more time for other household tasks, as well as schooling and supervising children.

# Methane capture and combustion from swine-manure treatment, Chile

Climate Neutral Now project number 33

The project consists of an advanced improvement to the common practice of swine-waste treatment, reducing a significant volume of greenhouse gases. The technology implementation is based on the use of heated anaerobic digesters with flares and activated sludge plants.

These projects prevent waste biomass or wastewater from decomposing and generating methane, which enters the atmosphere and contributes to climate change. The project co-benefits in the community are a reduction in air, soil and water pollution and improvement of health and safety.

#### N<sub>2</sub>O abatement project, Pakistan

Climate Neutral Now project number <u>5461</u>

This project converts  $N_2O$  (nitrous oxide) into substances with no or lower global warming potential, therefore reducing their impact on the climate when they are released into the atmosphere. Some project benefits usually include the preservation of the ozone layer and helping spread green technology worldwide.