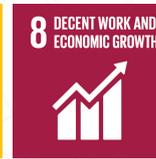




# CARBON-FRIENDLY COMPANY

MMG Aluminium AG supports the following UN goals for sustainable development:



## MMG Aluminium AG

# MMG

Aluminium  
Aktiengesellschaft

Participant ID: DE-3514-0109

Valid until: 07.03.2025

This certificate guarantees that the reported amount of 4815 tons of CO<sub>2</sub> has been accounted according to the standard of the Greenhouse Gas Protocol. The amount of 3210 tons of CO<sub>2</sub> has been offset with Gold Standard and VCS verified international carbon offset projects.

MMG Aluminium AG has acquired shares (certificates) in climate protection projects corresponding to the calculated volume of CO<sub>2</sub> and therefore plays a transparent part in the realisation of the projects. This ensures that the company compensates for its own CO<sub>2</sub> emissions, and thus scales back the rise in global warming.

The projects have been certified, and the issue and closure of the certificates is registered transparently.

MMG Aluminium AG is therefore a voluntary participant in emissions trading, and thus makes a contribution to maintaining a viable environment by reducing the emissions of greenhouse gases. The holder of this certificate makes a sustainable contribution to the commitment to tackle global warming.

Dipl.-Ing. Frank Huschka



CLIMATE  
EXTENDER



Verified Carbon  
Standard  
A VERRA STANDARD

Gold Standard®

Climate Security & Sustainable Development

## MMG Aluminium AG supporting climate protection projects:



### LAS PIZARRAS Hydroelectric PROJECT

#### Peru

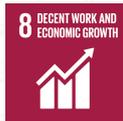
The Las Pizarras Project in Peru is a new run-of-river hydroelectric power project located at approx. 1,078 m.a.s.l, on the high basin of the Chancay river, in the district of Sexi, province of Santa Cruz, region of Cajamarca, in Peru.

The total installed capacity of the Project will be of 18 MW, with an electricity generation potential of 103.32 GWh per year. The Project aims to generate renewable electricity by using water from the Chancay river and supply this energy to the National Interconnected Electric Grid (SEIN). The Project will have an expected minimum operating lifetime of 40 years.

The Project is expected to avoid the emission of 68,132 tons of carbon dioxide equivalent (tCO<sub>2</sub>e) per year, which will amount to 681,323tCO<sub>2</sub>e for the first crediting period of 10 years.

Estimated Annual Emission Reductions  
68,132 t CO<sub>2</sub>

Category	Standard
Carbon	VCS 1348





## Burn Stoves Project Jikokoa

### Kenya

The BURN Jikokoa Stoves project allows families in rural Kenya to cook food using cleaner, more efficient cook stoves, thereby consuming less charcoal. Communities typically use wood and charcoal to fuel open fires and inefficient cook stoves, creating indoor air pollution, releasing CO<sub>2</sub> emissions and creating pressure on local forests. The Burn Stove Project manufactures and distributes the market-leading 'Jikokoa' stove locally, employing more than 400 people in sales, manufacturing and distribution – 60% of whom are women.

The stove's 'natural draft' technology reduces fuel consumption by up to 45% and cooking time by up to 50%, saving families up to \$300 on fuel a year. In 2015, Burn's innovative design was recognised by the internationally renowned Ashden sustainability awards.



**Category** Carbon | **Standard** Gold Standard GS5642

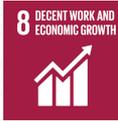


# Renewable Energy from Biomass, UPPPL, India Andhra Pradesh

## India

### Addressing methane emissions and promoting a sustainable use of resources in rural farms

*Fueled by poultry litter, this innovative project feeds renewable electricity back to the grid. This displaces electricity from thermal power plants in the Andhra Pradesh region, reducing emissions and supporting the expansion of the renewable energy industry. As the poultry litter is collected rather than left to decay in open fields, odour and sanitation are improved for the local villages, while job opportunities provided by the plant help boost the economy.*



### The Context

Prior to the project, litter from the local poultry industry was dumped in landfill pits near the farms, which resulted in methane being released freely into the atmosphere. In the first two decades after its release, methane is 84 times more potent than carbon dioxide in terms of heating up the atmosphere. This project is connected to the Southern Regional Electricity Grid of India, which is dominated by thermal power plants.

### The Project

The project involves installing a 7.5 MW capacity generator to burn poultry and biomass waste, including litter and rice husks, that will be collected from local farms. Besides the small internal consumption, the energy will be exported to the grid.

### The Benefits

By feeding into the grid, the project displaces electricity generated from fossil fuels, thus avoiding the associated emissions. In addition, it helps to avoid the methane emissions arising from poultry waste being disposed of in anaerobic lagoons in the surrounding fields. This improves the environment, in terms of sanitation and odor for the nearby villages resulting in better health and living conditions. The project also creates a number of job opportunities, a share of which goes to the local communities, boosting the regional economy, while training provides staff with skills that could help other renewable energy projects flourish.

Category	Standard
Carbon	Gold Standard 3072



## TOYOLA Promoting Improved Cooking practices

### Nigeria

*The project involves manufacturing and distribution of efficient charcoal cookstoves that would replace the inefficient cookstoves currently being used in the host country of Nigeria. The project will help thousands of families, small and medium commercial entities in Nigeria and will reduce the Green House Gas emissions.*



The project activity involves replacement of existing in-efficient cookstoves being used by majority of Nigerian population with highly efficient Toyola Cookstoves.

Over 71% of Nigeria's population, mainly poor people, cooks with solid fuel in inefficient traditional Cookstoves and open fires resulting in serious indoor air pollution. Due to this, Nigeria records the highest number of indoor air pollution related deaths, averaging 64,000 annually, especially among women and children in poor families (Source: Clean Cooking Alliance). This is why Toyola Cookstoves is primarily target at the majority, the poor part of the population.

The project described here will reduce greenhouse emissions by disseminating fuel-efficient charcoal stoves. The project is based on work by Toyola Energy Limited (TEL) in clean cookstoves space over past 10 years in various parts of Africa. TEL was established in 2003. It is owned and managed by highly educated and trained entrepreneurs. TEL was part of 50 informal metal artisans selected and trained by EnterpriseWorks Worldwide to fabricate the "GYAPA" charcoal efficient cook stoves.

Category	Standard
Carbon	Gold Standard GS7312



# VPA 204 Sierra Leone Safe Water

## Sierra Leone

The Micro-Scale VPA 204 Sierra Leone Safe Water project is eligible under the Gold Standard methodology Technologies and Practices to Displace Decentralized Thermal Energy Consumption Version 1.0.

The project will support the provision of safe water using borehole technology to hundreds of households within the Republic of Sierra Leone.

By providing safe water, the project will ensure that households consume less firewood during the process of water purification and as a result there shall be a reduction of carbon dioxide emissions from the combustion process.



Category	Standard
Carbon	Gold Standard GS7476/7477

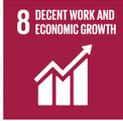


# Infravest Wind Farms CHANGBIN AND TAICHUNG

## Taiwan

### Harnessing the energy of coastal winds to power Taiwan communities

*These two wind farms help drive Taiwan's renewable energy expansion and pave the way for sustainable development. Each year, this project prevents over 320.000 tonnes of greenhouse gases from entering the atmosphere.*



### The Context

Despite the abundant coastal winds along its shoreline, Taiwan remains heavily reliant on fossil fuels, which make up over 75 percent of its total installed electricity capacity. Shifting towards sustainable energy is vital for both Taiwan's national security, and for its economic and environmental prosperity.

### The Project

This project harnesses the plentiful supply of wind energy along Taiwan's coast near Taichung in the west and Changbin in the east. The wind farms consist of 62 wind turbines, and generate over 480.000 MWh of clean power each year which is supplied to the local electricity grid.

### The Benefits

In addition to contributing to global climate change mitigation, this project is engaged in several nature preservation enterprises such as regular beach clean ups and guided tours that raise awareness about climate change, pollution and other environmental issues. The project has also led to the forestation of 2.400 m2 of land, encouraging local biodiversity.

Your investment in the project supports the energy transition and sustainable development goals in Taiwan.

Category	Standard
Carbon	Gold Standard