

Clima4Future

WHITEPAPER

Status: 01.12.2023

Our contribution to a
green planet.



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1. SUMMARY

Clima4Future was founded to realize visions such as the promotion of nature and social projects that have a positive effect on climate change. Our aim is to take an important step towards preserving the earth for our grandchildren and their children's children.

Our visions and activities should be perpetuated by Clima4Future. The ultimate goal is to jointly promote Co2 reduction and create a win-win situation for people, companies and the environment. The digital currency, the Co2Coin (CCC), was created for this purpose. The Co2Coin (CCC) is a digital token with a green footprint. The revenue generated by the sale of the Co2Coin is used to support climate-relevant projects. Clima4Future receives Co2 certificates through this funding. The Co2 certificates, futures, options etc. are deposited with the Co2Coin. The further sale of Co2Coins generates additional income and promotes new projects.

Even if the purchase of the Co2Coin promotes climate-relevant projects, it can still be traded on the stock exchange. The price is determined by the market. Clima4Future is working on projects to make the Co2Coin available to selected companies and retailers, both stationary and online.



2. INTRODUCTION CLIMATE CHANGE

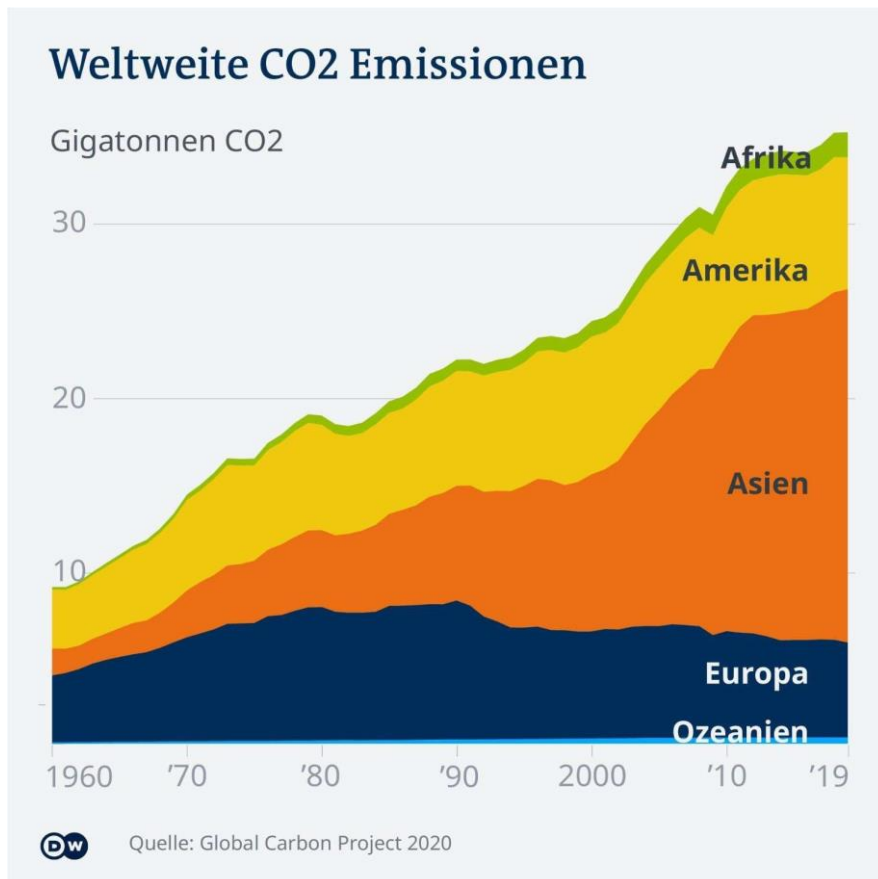
Climate change can no longer be denied.

Since 2010, the earth's temperature has been rising faster than ever before in human history. Against the backdrop of current developments, Clima4Future was founded and the vision of the Co2Coin project was realized. The founders, who themselves own land and forest areas, know the threat to nature from their own experience. Climate change can no longer be denied. The records clearly show a global rise in temperature. The resulting increase in weather phenomena is also affecting more temperate climatic zones.

Increasingly frequent storms are destroying forest areas and destroying harvests - with far-reaching consequences.

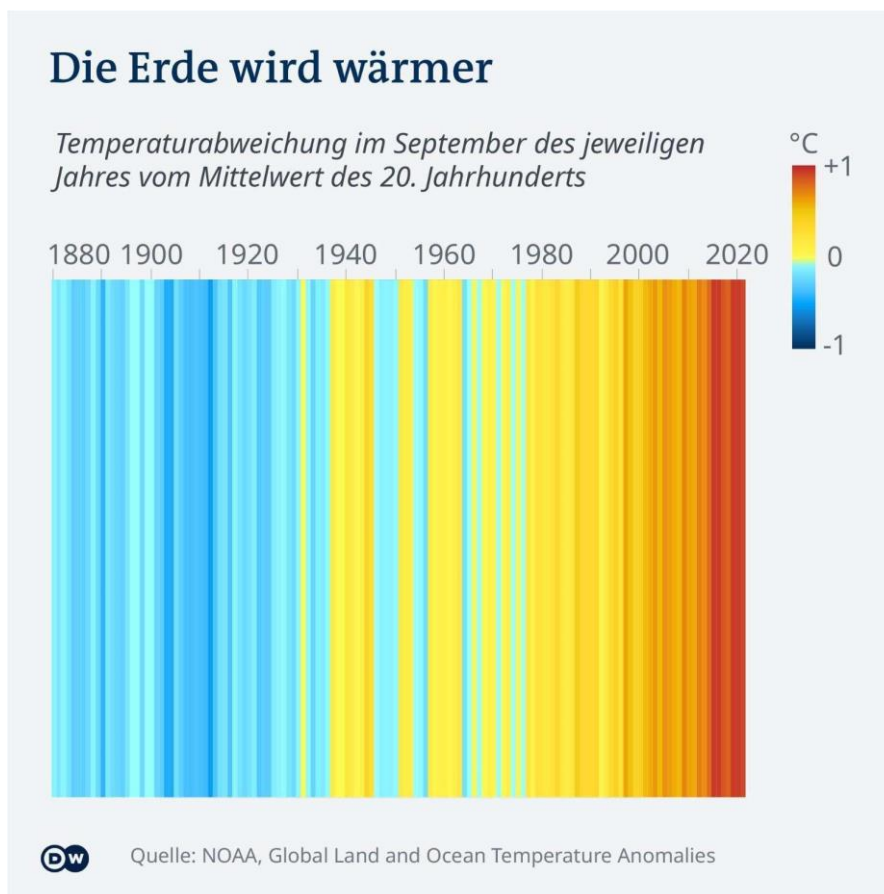


Climate change is happening all over the world. Mankind is already feeling the effects of this first-hand, for example through persistent droughts, floods, severe weather disasters and melting glaciers. The international energy agencies report that energy-related carbon dioxide emissions in 2021 were higher than ever before, rising by 6%. Worldwide, 36.3 billion tons of energy-related CO₂ equivalents were emitted - a historic record high. Since the 1950s, the amount of CO₂ has increased fourfold on average every year.

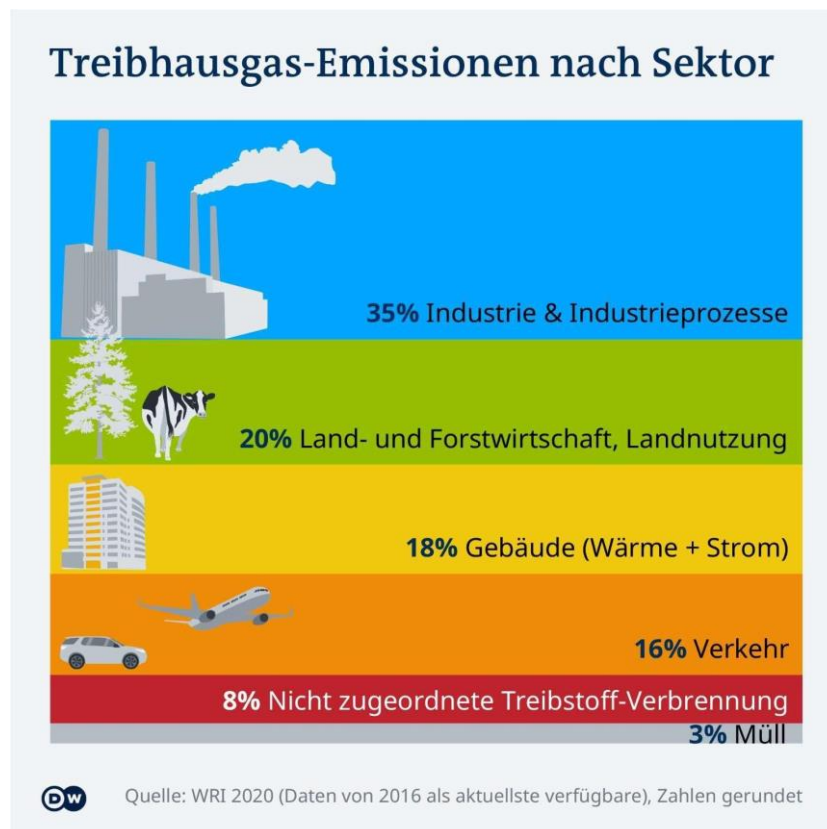


Numerous studies carried out worldwide prove that greenhouse gases produced by humans are the cause of current climate change. The top 10 countries with a high volume of CO2 emissions are: China (27.92%), USA (14.5%), India (7.18%), Russia (4.61%), Japan (3.04%), Iran (2.14%), Germany (1.93%), Indonesia (1.69%), Korea (1.69%) and Saudi Arabia (1.6%).

The increase in CO2 emissions worldwide and the associated rise in temperature has dangerous consequences for humans, animals and nature.



There are many reasons for this increase. The main reasons are energy production, transportation, industry, agriculture and waste, despite the fact that the population has quadrupled in the last 100 years.



This is why people and environmental organizations around the world are calling for mindful action, more sustainability in production and renaturation to protect flora and fauna and the well-being of humanity. Only if industry, politics and every single person take action against climate change is there a chance of stopping and reversing the negative development. Climate change, climate protection and climate neutrality are **THE** key issues of the future.



3. CLIMATE PROTECTION CLIMA4FUTURE

The Clima4Future company was founded to make a valuable contribution to combating climate change. Only together will we be able to preserve a planet worth living on for our children's children. While the rich industrialized nations can compensate for crop failures and damage for those affected, this does not apply to the poorer countries. Here the population suffers: lack of food due to droughts, loss of homes and farms due to flooding. It is the declared aim of the initiators of the Co2Coin project to actively protect the climate and to use climate activities to access new developments and technologies.

The ultimate goal is to jointly drive forward CO2 reduction and create a win-win situation for people, companies and the environment.

Clima4Future focuses on the promotion of climate-relevant projects in the context of private and public sector involvement within the framework of the usual global mechanisms of our economies.

A central element of the promotion is the sale of the Co2Coin.



4. THE CO2COIN (CCC)

What characterizes the Co2Coin:

- In total, only a maximum of 100 million can be created.

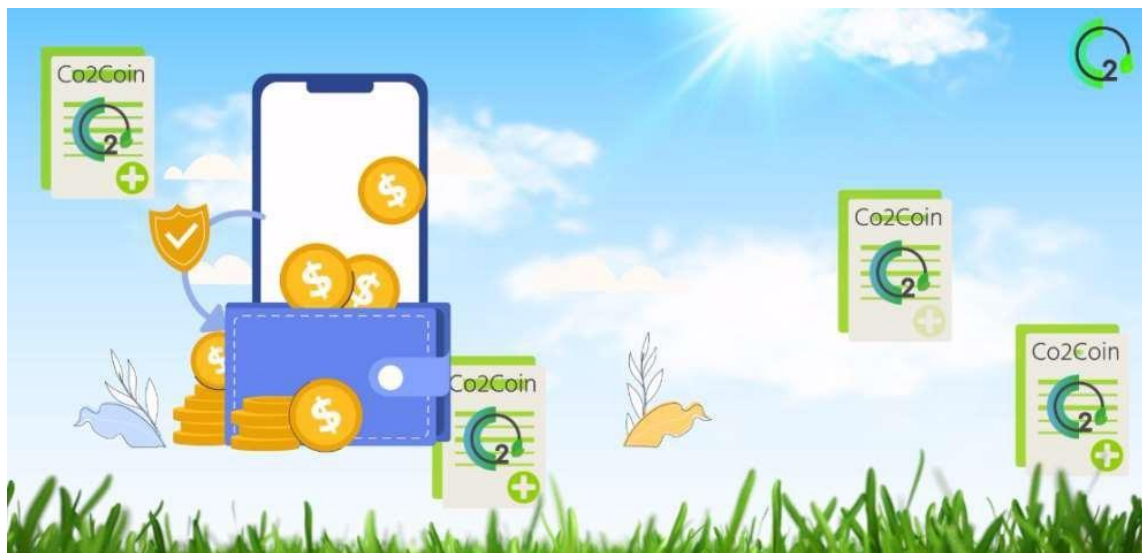
The Co2Coin is a fungible token according to the ERC20 standard.

- Since the Ethereum blockchain was based on the Co2-efficient standard "Proof of Stake", the Co2Coin is available on Ethereum.
- The Clima4Future GOWallet app for iOS & Android will provide an overview of funding projects, act as a wallet and thus also allow the transfer of Co2Coins (CCC).
- The Co2Coin will be listed on the Vindax.com exchange from September 2023.
- The webpage (www.clima-coins.com) shows the current price (value) of Co2Coins (CCC) in USDT, US-\$, Euro and ETH.
- In addition, the last % changes are displayed for the period: 24h (24 hours), 7d (7 days) and 30 d (30 days). Our CO2Coin Value Calculator allows you to calculate the current total value of the available CO2Coin (CCC) in US\$.
- The free price is determined via the stock exchange.



What makes the Co2Coin green - positively deposited Co2

- The proceeds of the Co2Coin are used to support environmental projects and thereby acquire Co2 certificates from green partners.
- Compensated quantities of CO2 are assigned to each Co2Coin.
- The transaction costs (approx. 0.07kg of CO2/transaction) of the Co2Coin are offset by the positively deposited CO2.



Co2Coin (CCC) -Technical data

Name of the coin: Co2Coin
Coin-Ticker: CCC
Launch of the Co2Coin: September 2023
maximum coin volume: 100,000,000 CCC

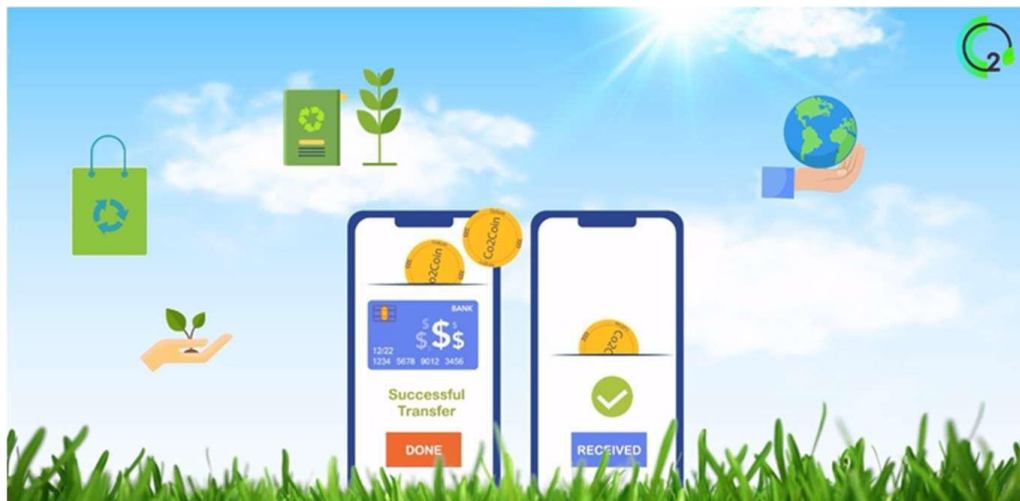
Explorer & Smart Contract

<https://etherscan.io/token/0xb8E08DdA1a886013f8526f0B76584d27e6527Bf7>

Website: www.clima-coins.com

Whitepaper :<https://clima-coins.com/whitepaper.pdf>

Blockchain type: Ethereum (since Proof of Stake is active)



5. GOWallet app

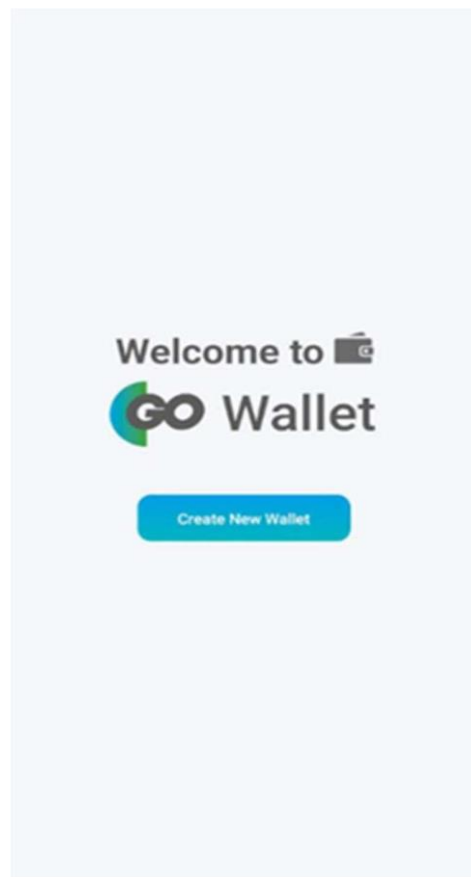


The GOWallet is an intuitive, high-security app developed by us in accordance with the ERC20 standard for Android and iOS, with which the user can create up to 5 different accounts / internal wallets.

With the exception of Co2Coin (CCC) and ETH, all tokens will be imported into the portfolio via an import function.

This primarily serves to protect against hackers and prevents third parties from simply large numbers of "advertising tokens" to the GOWallet (there are cases where, for example, a user suddenly has 500 different tokens in his wallet/portfolio).

GoWallet also displays the current price of the Co2Coin (CCC), as well as the number and the remaining time (Remaining Time) for Co2Coins (CCC) in the portfolio that have been locked up for 367 days.



6. THE CO₂ - CERTIFICATES

What is a CO₂ certificate?

The Kyoto Protocol, which came into force in 2005, is the first binding global treaty. It was decided to curb climate change. It defined the permitted amount of CO₂ emissions and stipulated that CO₂ may only be emitted with an authorization in the form of emission rights.

CO₂ certificates stand for emission-reducing measures that include a calculated compensation of CO₂ emissions for 1 ton of CO₂ per certificate. This is achieved by promoting climate protection projects, such as forest conservation and agricultural projects.

CO₂ certificates are allocated to companies by governments and are at the heart of the fight against climate change. In order to guarantee the quality and integrity of the certificates, minimum prices are set so that only an increase in the price is possible. In addition, there are monitored standards and verification procedures by independent institutions. Today, CO₂ certificates are also traded via various institutions as well as on exchanges. The polluter pays principle applies. Anyone who emits greenhouse gases that are harmful to the climate in excess of the permitted amount must purchase emission rights in the form of CO₂ certificates.

The number of permits or certificates is based on the total greenhouse gas emissions in regular operation.



Emissions trading takes place in the regulated market. This means that a CO₂ certificate acquired in emissions trading entitles a company to produce one tonne of carbon dioxide within a certain period. In addition, there are companies that are allowed to issue Co₂ certificates through Co₂ binding.

To illustrate this, a presentation by the Federal Environment Agency from 2004.


Operator		
	5.000 t	5.000 t
CO ₂	4.500 t	4.500 t
Available certificates	4.000 t	5.000 t
Actual CO ₂		
Trade	Sale 500 t	Additional purchase

Fig.1 UBA2004

7.ROADMAP



We regularly present the successes and new projects in our **GoWallet app** or on our website

<https://www.clima-coins.com> before.



8.THE TEAM

Team members of the Clima4Future project

The Clima4Future team consists of several members who deal with administrative and information technology matters. In addition, the broad network of advisors in the climate-sensitive community helps us to find the best projects and solutions to move forward and make a positive impact on the climate.



9. FUNDING PROJECTS

Clima4Future supports companies and initiatives worldwide that are striving for climate neutrality or have already implemented it - such as e.g. the WeGrowWood initiative in India.

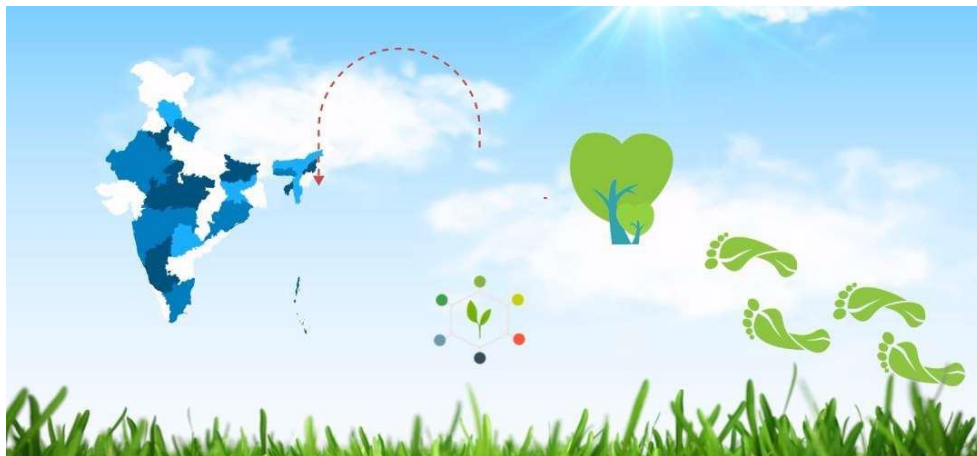
WeGrowWood creates a sustainable livelihood for the Indian population and makes an active contribution to climate protection - by planting Kiri trees (lat.: Paulownia) in a perfect climatic environment. These trees have the remarkable ability to absorb significant amounts of carbon dioxide from the atmosphere and release oxygen, which makes a significant contribution to combating climate change and is an effective tool in the fight against global warming.



Tree plantations are fully amortized within 5 years and no further investments are required. From this point onwards, the first profits are generated after a further 2 years and then continuously with each harvest cycle. Each harvest cycle also generates new CO2 certificates.



According to forecasts by various recognized experts on carbon credits, prices are expected to rise to \$200/m.t. by 2030 and more than \$200/m.t. by 2040. exceed \$400/m.t. It is therefore to be expected that revenues from carbon credits will be substantial in absolute terms, and increasingly so.



Clima4Future generates emission certificates and also creates a high value in wood, whereby India even has to import around 80% of its wood requirements.

From Kiri trees to CO2 credits

Greenhouse gas emissions are significantly reduced. Through e.g. the TÜV certification body, we are credited with VERs (Verified Emissions Reductions) (= one VER) offsets one tonne of CO2 emissions.

We then trade these carbon credits received via the Co2Coin international.



Other projects are also supported by Clima4Future. The number of projects to be supported also depends largely on the sales of the Co2Coin (CCC). It is important to us not to fragment the volume of funding too much in order to marginalize the support for individual projects.

Below we present the WeGrowWood project. It started in 2017 and has proven to be successful in addition to having an inspiring vision for almost the last decade. Only by increasing support for such projects can we significantly increase the magnitude of the positive impact on the Earth's entire ecological system.

The climate champion of nature

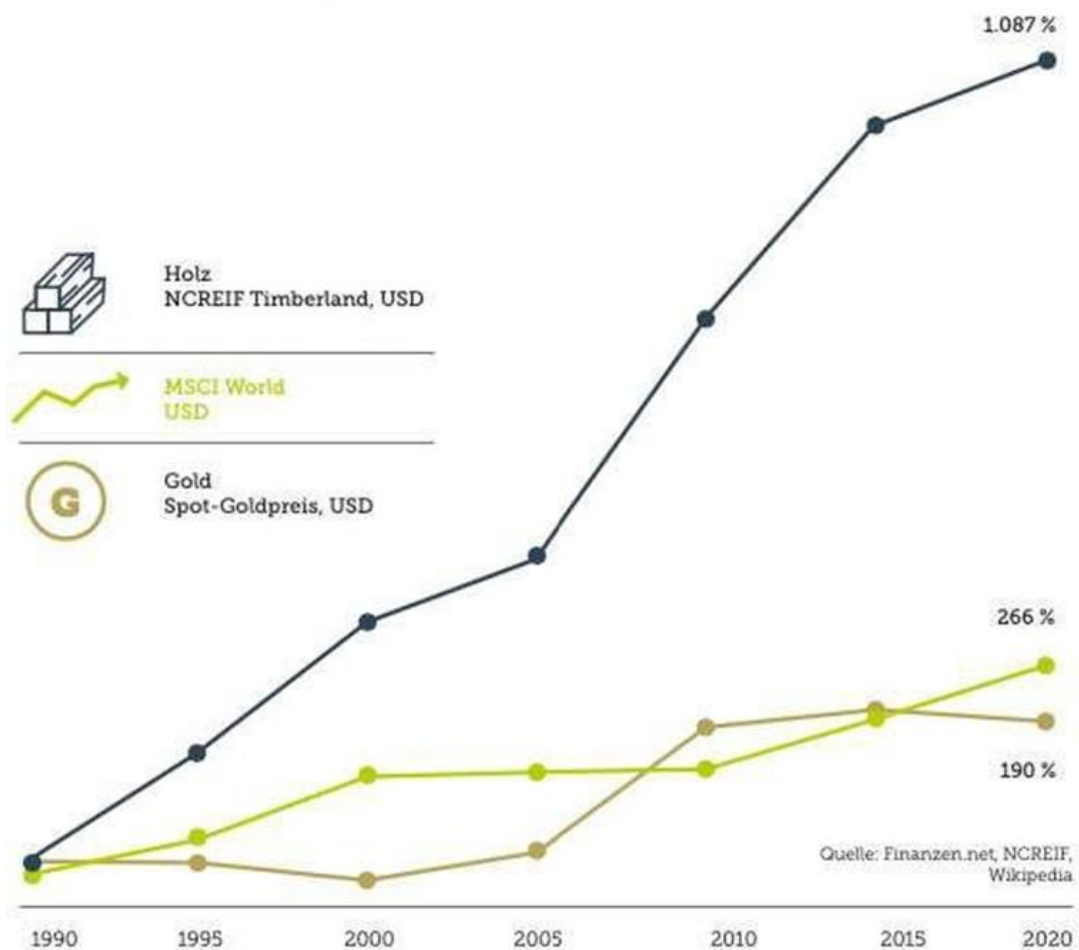


WeGrowTogether

By participating in the WeGrowWood initiative and planting the fastest growing tree in the world, the promotion not only creates carbon credits and protects the global weather, but also high values of Kiri tree wood. The "aluminum" of the wood is created when the Kiri tree has reached its full size and for which the replanting of further Kiri trees must be cut beforehand.

The vision of sustainable development of fallow farmland has become reality!

The coveted Kiri tree wood is very hard and light at the same time and is used internationally for boat building, the construction of musical instruments, caravan fittings and much more. In addition, timber prices have risen faster than the MSCI share index and the price of gold.



The world's fastest growing deciduous tree



The Kiri tree grows up to 6 meters high in its first year. In warm climates, such as mainland India, it reaches a trunk diameter of around 40 centimeters within 7 years (most teak trees: 15-40 years). This has a number of enormous advantages, from the immense CO₂ absorption, the fastest wood production, the profitability and much more.

Stores 10 times more CO₂



The Kiri tree has by far the highest CO₂ storage capacity in the world; more than 10 times higher than any other deciduous tree on earth. In most areas of India, a single tree binds almost 900 kg in its first 7-year growth cycle alone! From then on, it absorbs an average of 100 kg of CO₂ per year. This incredible ability combined with its exceptionally narrow crown results in an unprecedented CO₂ absorption of up to 130 tons (m³) per hectare per year! (For comparison: average mixed forest 5-8 m³ per hectare/year, rainforest approx. 15m³/year)

Very low water requirement



Paulownia has a very low water consumption - only 10-12 liters per day when fully grown. Compared to other trees: it only needs 83 liters per 1 kg of wood it produces - (for comparison: eucalyptus = 7,000 L/kg)

Improves the soil quality



Kiri trees are known to thrive in moderately fertile soils; they do not require very 'rich'/heavy soils. In fact, Paulownia trees have long been known to measurably improve soil quality over time and even increase the groundwater storage capacity of the subsoil in which they grow.

Grows back after the harvest



After cutting down the kiri tree, there is no need to plant a new seedling - it simply



grows back within a few days!

This is not only "a great cost-saving factor", but also accelerates wood productivity and carbon sequestration immensely. And in this case it grows even faster, because the small seedling has the root system of a mature tree to support it!

Surprisingly s t r o n g

The wood is known as the "aluminum of wood", the "lightweight champion". Its honeycomb cell structure (see illustration below) gives the wood its durability, flexibility and uniquely high relative strength despite its low weight:
Compressive strength along the fibers - 281 kg/m³



No termites



Another great advantage of the wood is that it is naturally termite-repellent! It contains a 'tannin' that termites do not like and avoid. This fact is another decisive advantage, as it opens up the possibility of using wood for outdoor constructions, which is impossible in many areas with other types of wood.

High calorific value



Despite its light weight, the wood has a higher calorific value than coal: Kiri tree: 20.90 kJ/g; coal: 14.64 kJ/g! Combined with the fact that it contains far fewer other pollutants than coal, it is a renewable natural resource with high potential to replace or supplement coal as a raw material. In addition - as the wood does not absorb moisture, pellets made from Paulownia wood are much more stable in damp weather and do not disintegrate.

Low thermal conductivity



The thermal conductivity of paulownia is twice as high as that of other average wood. This makes it the ideal wood-based material for heat and cold insulation.

Weather-resistant and unyielding



Once the wood has dried, it absorbs no or very little water. As a result, it no longer changes its shape under changing weather and humidity conditions, which also makes it a perfect building material for outdoor use. Paulownia Wood has been extensively tested at the Burckhardt Institute at the University of Göttingen and has excellent dimensional stability without cracking, buckling or warping.

WeGrowWood's Mission & Vision:

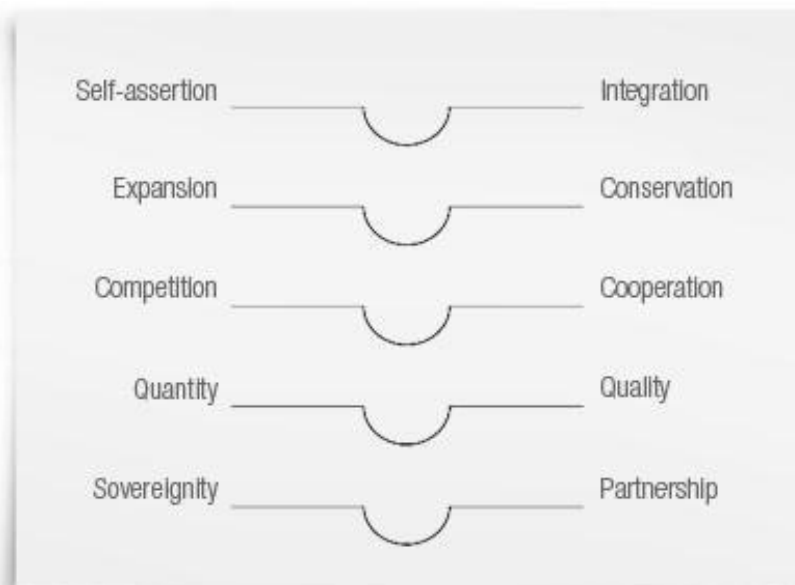
"Sustainable development for a future in which everyone can fulfill their individual potential; in which humanity lives in social forms that reflect human dignity; and in which all economic activities are in harmony with ecological and ethical principles."

"Kiri tree plantations not only fulfill the protection obligations of all stakeholders, they are also highly profitable and simultaneously fulfill 12 of the 17 UN Sustainable Development Goals."

"This demonstrates our commitment to a wide range of positive impacts on the environment, society and the economy that go beyond the mere absorption of CO2"

WeGrowWood's values:

In nature, each organism is independent and at the same time connected to other organisms. Inspired by ecological principles that represent the wisdom of nature and the universe, we continuously strive to achieve and maintain a harmonious balance between the following polarities and integrate them into our development.



WeGrowWood's mission:

To realize our vision of holistic and sustainable development in India ...

- we are establishing biodynamic farming methods as a competitive solution to meet the challenges of the 21st century, in the environmental, social and food sectors,
- We support individual development through holistic Education and medical care,
- we create fair and reliable workplaces that reflect human dignity and support the individual development of each employee,
- we create business models based on ecological and ethical principles,
- we invest in sustainable development through research,
- we advocate a holistic approach to sustainable development both locally and globally.

WeGrowWoods Vision 2044:

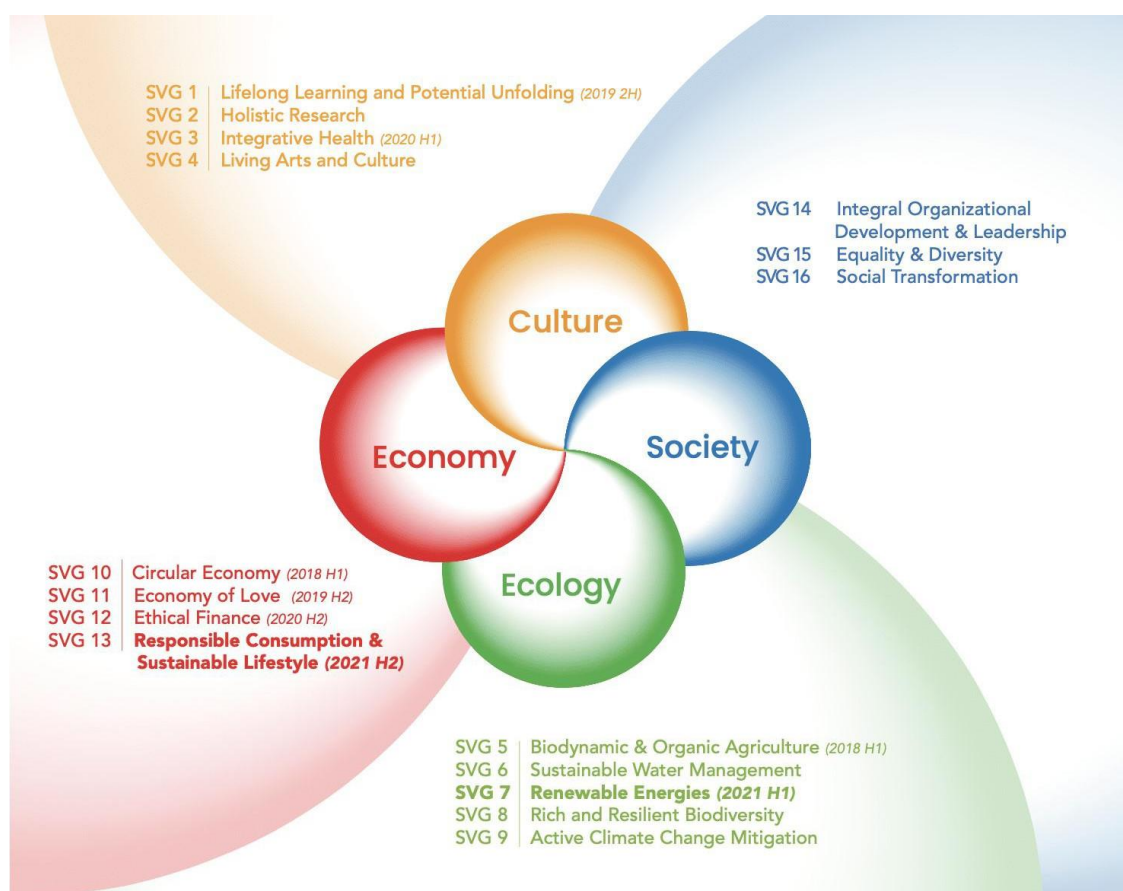
The WeGrowWood community has further developed the vision, mission and goals with a view to the next 20 years. The Vision 2044 formulates how WeGrowWood wants to transform India sustainably in the coming decades.

Initially 87,626 farmers will be involved with an estimated growth to 639,521 farmers by 2044.



Agriculture in India - A pretty big task

WeGrowWood Agrikultur acts as an umbrella for agricultural activities and businesses. From the reclamation of arable land through natural pest control and planting to livestock farming and composting, the entire agricultural cycle is covered.



Agriculture is more than just planting the soil

Biodynamic agriculture is a method of organic farming based on a holistic understanding of life processes. As one of the first sustainable agricultural movements, it treats soil fertility, plant growth and animal husbandry as ecologically interlinked areas and emphasizes spiritual and cosmic perspectives.

The basic idea of biodynamic agriculture is the sustainable treatment of animals, plants and soil as a single system. A wide variety of plants and animals should be present on the farm: Trees, diverse plants of different seasonality and different animals - for example birds, insects and small animals such as hedgehogs, lizards and others. It is important to maintain the balance between flora and fauna, not to disturb the life cycle and to support it with the respective contributions needed. In this way, they strengthen each other and contribute to the nutrition of humans and themselves. Therefore, the cultivation plan takes into account a crop rotation that is related to the circumstances of the individual arable land, not to disturb the life cycle and to support it with the respective required contributions. In this way, they strengthen each other and contribute to feeding people and themselves. Therefore, the cultivation plan takes into account a crop rotation that is related to the circumstances of the individual arable areas.

A cultivation calendar is used to keep the right time for farming. The basic principle of crop cultivation is the creation of a compost from plant residues and animal manure. This mixture is treated with six biodynamic compost preparations made from medicinal plants. In addition, there are two biodynamic field preparations that are used in the cultivation of the fields. The biodynamic preparations improve all the bacterial, fungal and mineral processes present in the organic farming system. They are therefore helpful for sustainable agriculture.



First impression: Impressive!

In January 2023, another 2.5-hectare plantation was planted in Amalner, Maharashtra, which was significantly expanded in July 2023. In October, further Kiri tree seedlings were ordered for three plantations in Gujarat and Maharashtra.

To establish further model plantations in the region. These should prove that biodynamic agricultural methods are the best option for the reclamation of arable land, food security and sustainable development for India.

WeGrowWood has ensured sustainable development on all three farms. The farmland has been reclaimed and developed - including the necessary infrastructure and community centers

Healthy plants can only grow in healthy soil

Soil is a living organism. The solid and limited surface of the earth is the habitat of countless organisms and provides stability for plant roots. Soil is the fundamental basis for food production. In the future, the global earth's surface will only be able to produce enough food for all humans if we preserve its fertility, avoid erosion and enable sufficient water storage capacity.



Vital floors

WeGrowWood transforms each farmland into a living soil. Today, the top layer of WeGrowWood's first farm soil (between 0 and 1.30 cm deep) is rich in organic matter and has a broad spectrum of microbiological life - an essential prerequisite for increased water absorption capacity. In addition, the microorganisms are important for making nutrients such as potassium, phosphate or nitrogen available to the plants. Three techniques help us to ensure this vitality in the soil: firstly, the use of compost and other organic fertilizers, secondly, the rotation of crops and thirdly, the use of biodynamic preparations.



Compost as an organic fertilizer

To build up the first organic mass in arable land, we use compost that we produce on our own farm (see below). The continuous treatment of the field with compost tea (a mixture of compost; molasses and water,) maintains and accelerates the activity of the microorganisms in the compost. In some cases we need to add other organic fertilizers.

Plant rotation creates vitality

By rotating nitrogen-consuming and nitrogen-accumulating crops (intercropping) such as legumes, we prevent soil depletion. Instead, the roots of e.g. clover and beans can build up more organic matter. In general, we always plan to plant at least 20% of the farm area and at least every fifth season on the same plot or in the same greenhouse with legumes.

Biodynamic preparations

One difference to other organic farming methods is the use of eight biodynamic preparations in the cultivation of plants. WeGrowWood Horn manure (cow manure filled in cow horns buried in our soil in winter) and horn pebbles (pebbles filled in cow horns buried in our soil in summer).



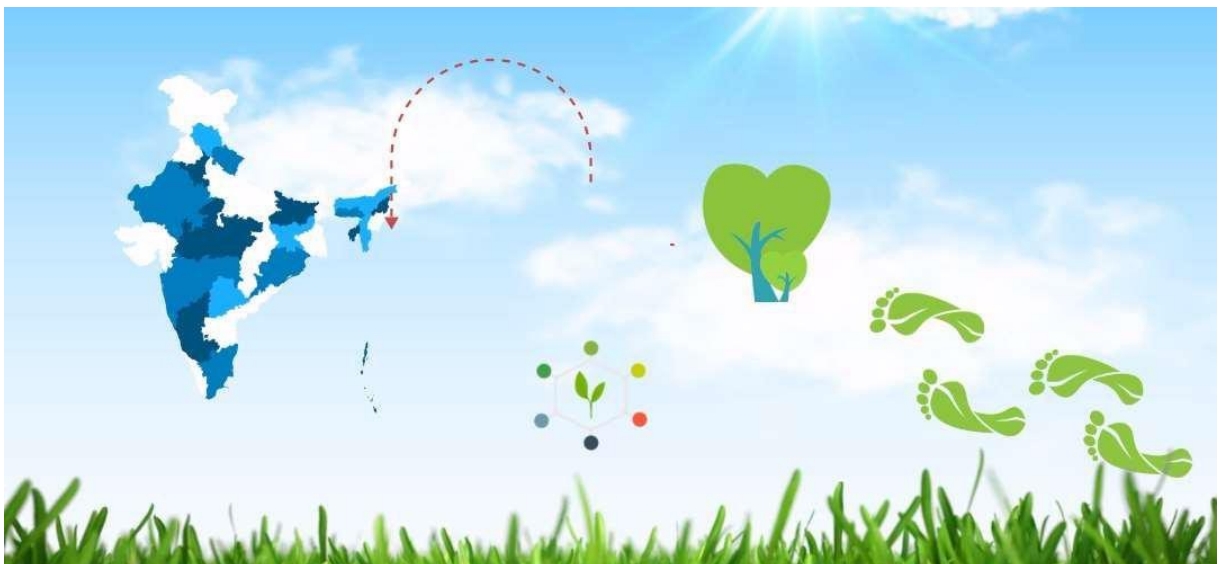
Both are sprayed onto the field. For the compost, six different medicinal plants are produced in a special way.

What is biodynamic?

Plants form the dress of the earth. In many parts of the planet, they reflect the seasons. More than 500,000 species are rooted in the earth and build up their substance through sunlight, carbon dioxide and water. By producing the necessary oxygen, forests can be considered the lungs of the earth. With all their parts, plants provide food and serve as medicinal remedies as well as multifunctional raw materials. They can be preserved in their diversity and further developed in their effectiveness through careful management.

We do not use chemical fertilizers or pesticides when growing. Instead, we rely on natural solutions for pest control and grow a variety of plants to maintain the natural balance.

Each plant has its own role in the soil and ecosystem, such as beneficial organisms and natural enemies for different types of plants. To maintain the natural it is important to avoid monocultures and instead combine different plants on a farm - also through green corridors between individual fields.



Natural pest control

We use the extract of rivet trees to stop the growth of caterpillars and other pests, and also use pheromones to trap or attract insects. In 2010, the organisms will be used on our own fields. However, they are also sold on the agricultural markets as an efficient alternative to regular pesticides or other artificial chemical products that are harmful to soil, plants, air and humans.

GMO free organic seeds & seedlings

When it comes to the issue of future food security, conventional food companies often justify the development and use of genetically modified organisms (GMOs). We follow a strict

"No GMO" policy.

Humans pollute the air every day, even though we cannot live without it. The air in our atmosphere is important for all aerobic creatures. Only in an environment with clean air can humans and animals live healthy lives. Global warming drastically illustrates how important balanced conditions and temperatures are for the atmosphere. Stabilizing these temperatures is the best way to avoid natural disasters related to climatic conditions.



The climate above the surface of the soil is a factor that determines how quickly soil deteriorates and water evaporates. By planting trees around the fields, we achieve several effects in addition to a pleasant scent:

The trees break the wind so that it cannot blow away the top soil. The shade brings cooler and more humid air, which creates a microclimate between the surrounding rows of trees in a field. The photosynthesis of the trees uses carbon dioxide and releases the required oxygen instead. In addition, the groundwater level slowly rises in the long term due to the cooler surface, bringing additional microclimatic changes.

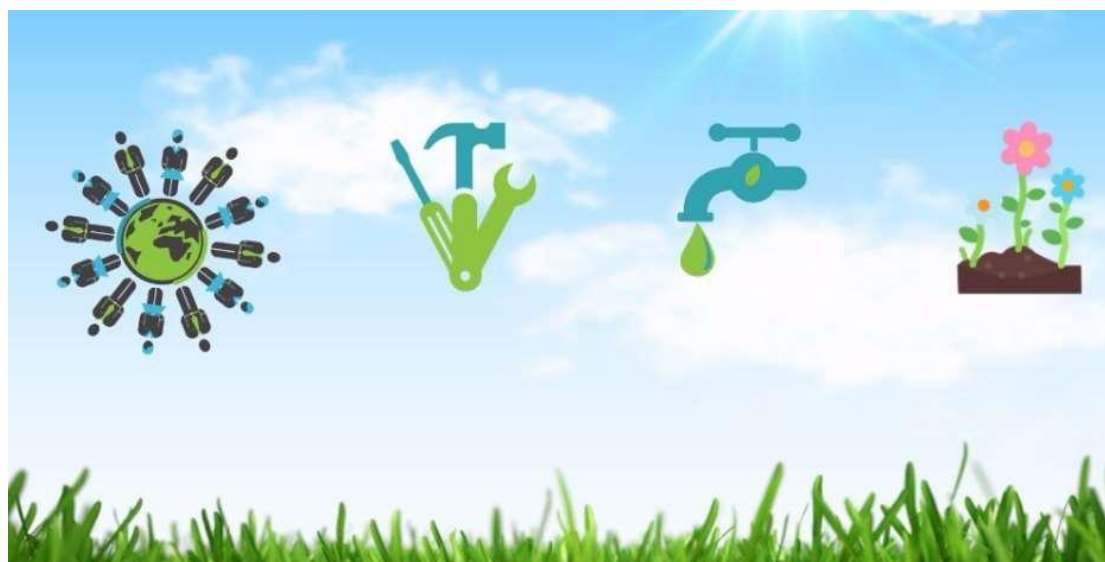


More than just an additive in your drink.

Water is the basis of all life

Water forms the basis of all life. The hydrological cycle of planet Earth is similar to the human circulatory system: water evaporates, falls back as rain and runs from freshwater rivers into the salty oceans. Without the influence of humans, the water clears and purifies itself along the way. 71% of the earth's surface is covered by water - mainly salt water. Drinking water is a scarce resource and must not be wasted or polluted.

WeGrowWood needs water to irrigate the plants in the fields and the green corridors as well as for processing and for the employees. We use three sources of water: River water, government-distributed water and well water. Certain rules apply to water consumption on all farms and in all operations, although they are not yet set by written regulation. The wastewater from all operations is reused after treatment as irrigation water for the trees on the WeGrowWood farm.



We support the CEO Water Mandate, a global pact of the United Nations (UN Global Compact Initiative). As India will be severely affected by global water scarcity, we see it as one of our top priorities to raise awareness about the careful and efficient use of the country's water sources.

Wastewater treatment with effective organisms

Effective Microorganisms (EM) are an aqueous mixture of 8 aerobic and anaerobic species, such as from the yeast family, lactic acid and photosynthetic bacteria. When applied to wastewater, two effects can be observed: The activities of the microorganisms drastically reduce the odor and the sewage sludge in the wastewater treatment plant is reduced by half.



Impressions



In fact, this is just a small excerpt from the large WeGrowWood project. Even during our personal visits to India, we quickly realized that the comprehensive approach and the positive effects are almost impossible to grasp in a short space of time.



10. REFERENCES

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