

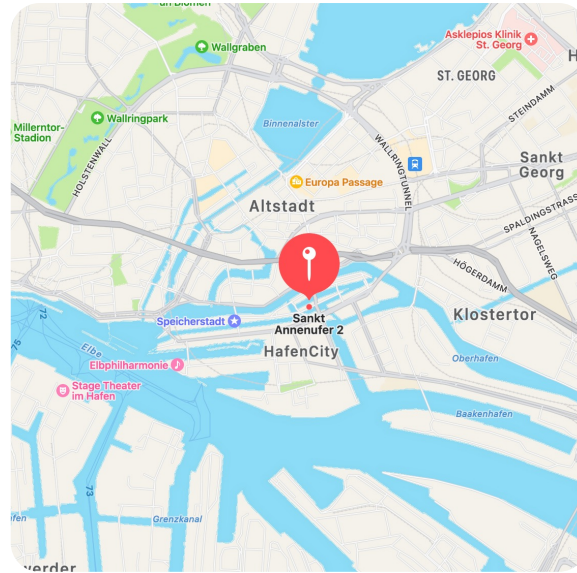


# Inwertsetzung von CO<sup>2</sup> Speicherleistung im Wald

14. Juni 2023

**Forstlicher Betriebsvergleich Westfalen-Lippe**

# Jesper Kolk



## Lebenslauf in Zahlen

3

**Jahre**

Ausbildung Groß- und  
Außenhandelskfm

3

**Jahre**

B. Sc. Wirtschaftsingenieur  
Universität Hamburg

7

**Jahre**

Berufserfahrung im  
Projektmanagement Bau

10

**Jahre**

Kommunal- und  
Landespolitik

42

**Hektar**

Vieh- und Weidewirtschaft in  
Nordfriesland

# MANAGEMENT TEAM CarbonStack



**Julian Kakarott**  
CEO

Co-Founder



**Jann Wendt**  
CIO

Co-Founder



**Jesper Kolk**  
CRO

Co-Founder



**Noah Winneberger**  
CTO

Co-Founder



**Ivonne Sokoll**  
CMO

Manager



**Per Liljenqvist**  
Business Angel

Advisor

Our management team combines:

**4**

**Years**

of research on carbon credit  
mechanisms

**11**

**Years**

of experience on remote  
sensing technologies

**9**

**Years**

of experience on database  
technologies

**24**

**Years**

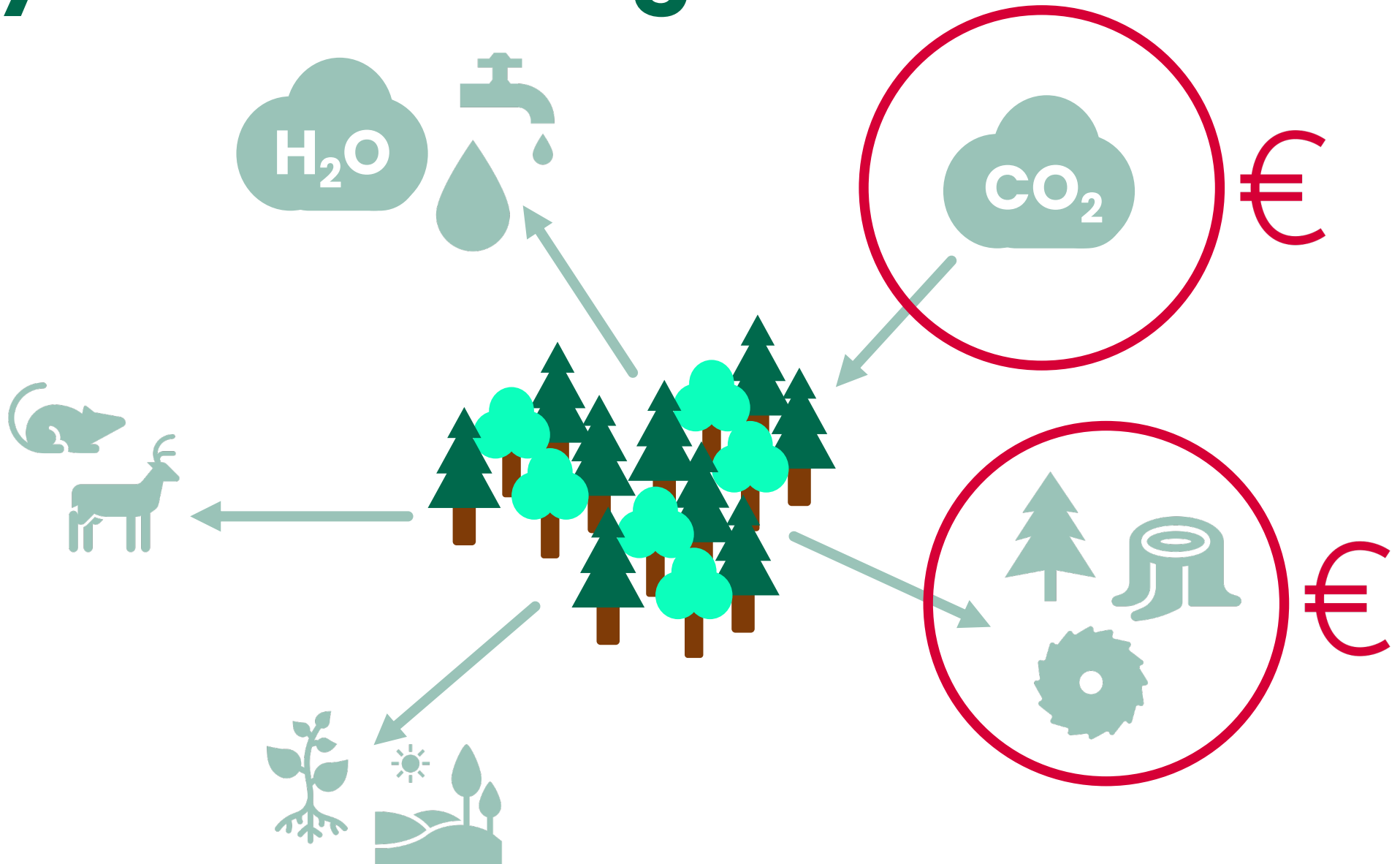
of marketing experience in  
various industries

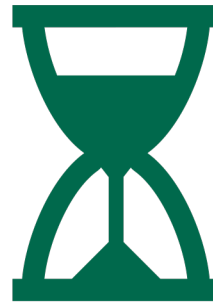
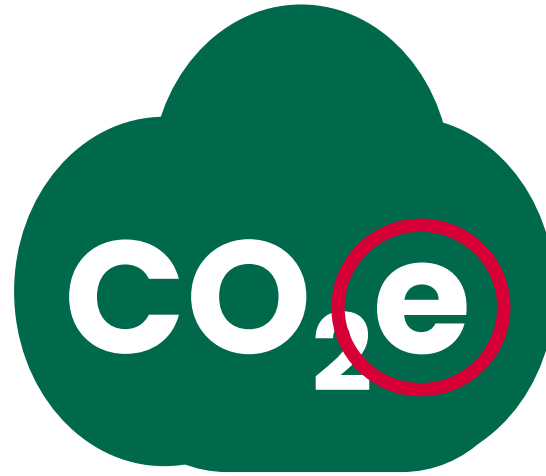
**28**

**Million €**

Raised by companies led by  
our team

# Ökosystemleistungen







# **Einordnung unseres CO<sub>2</sub> Marktes**

# BRENNSTOFFEMISSIONSHANDELSGESETZ



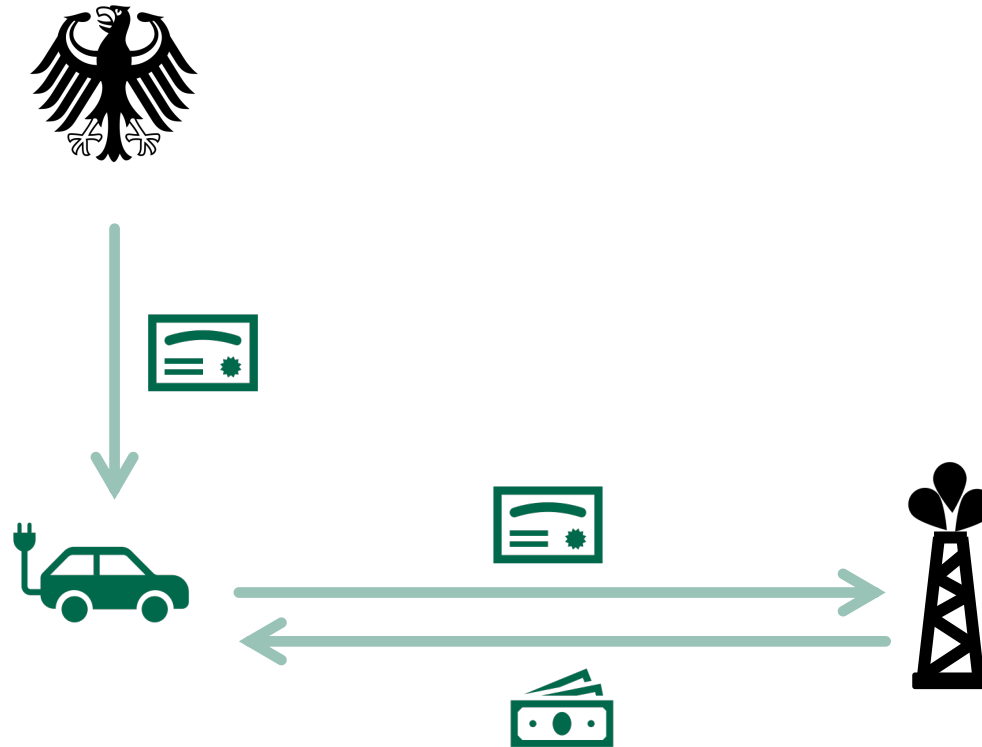
German Emission Trading for Mobility and Heat.  
**BUT:** No Cap & Trade. Prices are fix, no cap.

**25€ per tCO<sub>2</sub>e**



# Treibhausgasminderungsquote

(THG-Quote)





# Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)



CORSIA is implemented in three phases: a pilot phase (2021–2023), a first phase (2024–2026), and a second phase (2027–2035). For the first two phases (2021–2026), participation is voluntary.

**GOAL: CORSIA freezes aviation emissions on the level of 2020**

# FIT FOR 55

(European Green Deal)



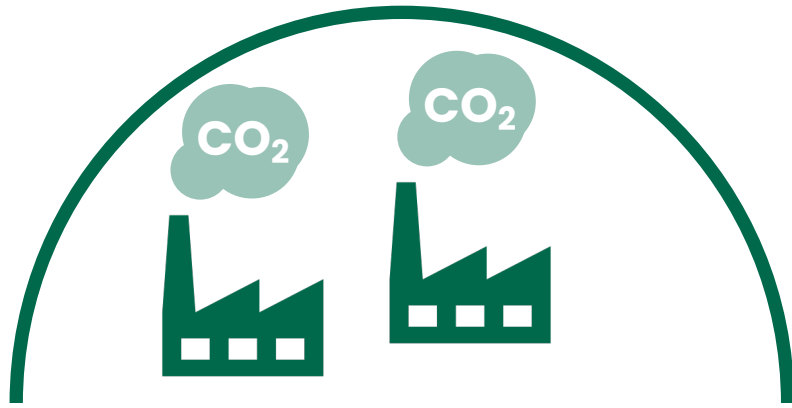
**Integration of mobility, heat and maritime emission in the ETS.**

- phase out free allocation of emission allowances to aviation and to the sectors that are to be covered by the carbon border adjustment mechanism (CBAM)
- implement the global carbon offsetting and reduction scheme for international aviation (CORSIA) through the EU ETS
- increase funding available from the modernisation fund and the innovation fund
- revise the market stability reserve in order to continue ensuring a stable and well-functioning EU ETS

# ETS (Emission Trading System)



**CAP**



**LIMIT OVERALL EMISSIONS**

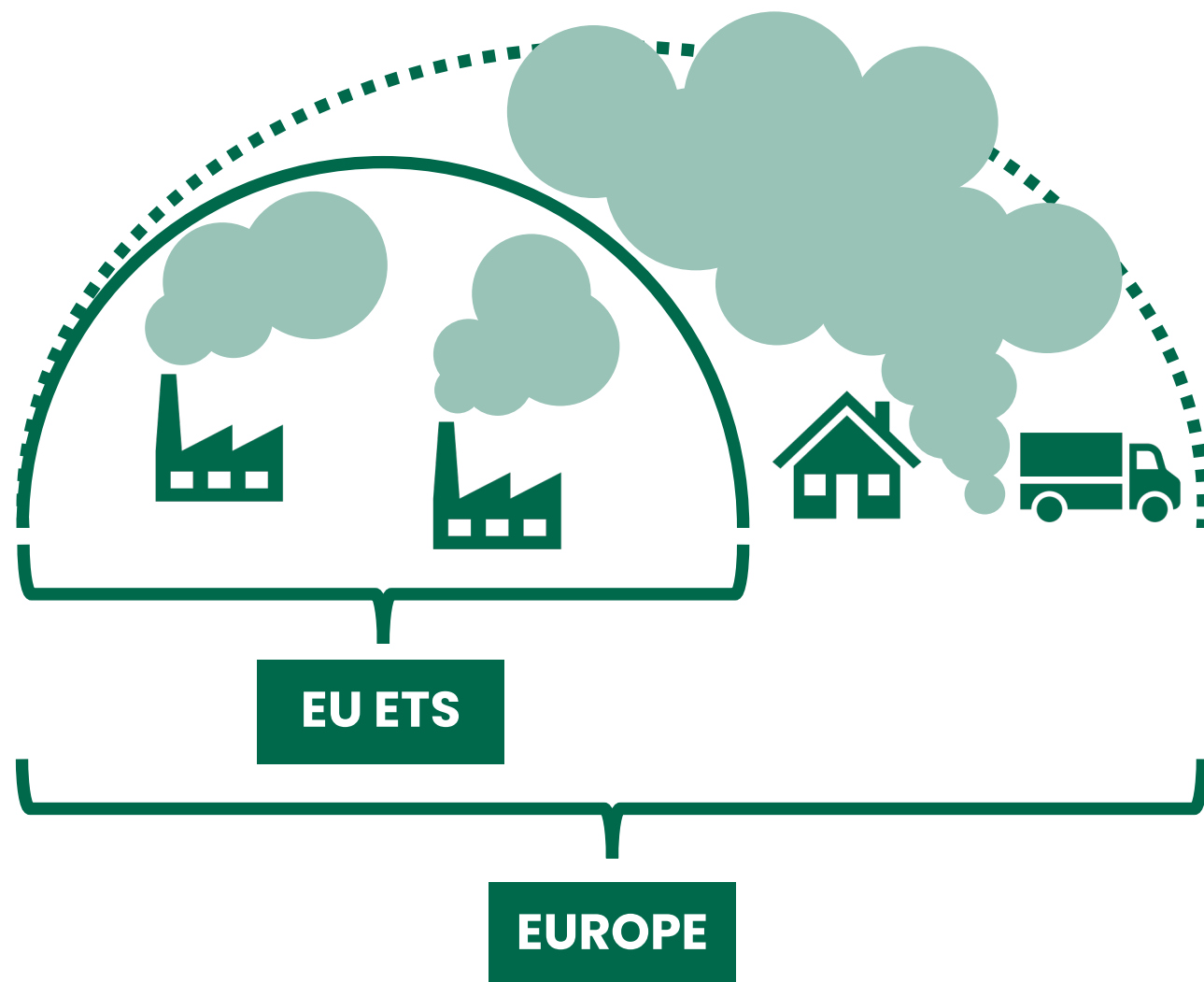
**TRADE**



**ECONOMICALLY EFFICIENT**

**100€ per tCO<sub>2</sub>e**

# EU ETS



## SCOPE

**45%**

of CO<sub>2</sub>e regulated by EU ETS

**Sectors:** Aviation, Heavy Industry, Energy

**55%**

of CO<sub>2</sub>e regulated by national targets (Effort Sharing)



# Einordnung unseres CO<sub>2</sub> Marktes

→

**FAZIT: All das sind wir nicht!**



# **VOLUNTARY CARBON MARKET**

# VOLUNTARY!



**Carbon Credits / Carbon Offsets are  
voluntary and are not issued by official or  
governmental bodies!**

~~100€~~ 10€ per tCO<sub>2</sub>e

# STANDARDS





# STANDARD STRUCTURE

Example by Verra



## Organization



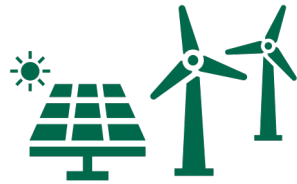
## Standards



## Methodologies

VM00XXX

# PROJECT TYPES



Avoidance

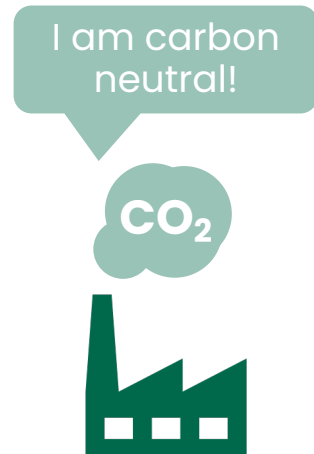


Removals

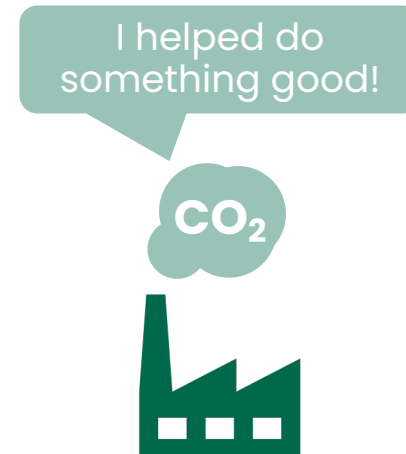
# CLAIMS



## Compensation Claim



## Contribution Claim



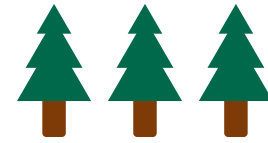
# VERIFICATION



**Ex-ante / validated**



**Ex-post / verified**





# ADDITIONALITY

Proof that the project activity would not have occurred without one of the following additionalities

**All standards apply a common definition of additionality: A carbon credit is considered additional if the emissions reduction that creates the credit would not have occurred in the absence of the activity that generates the credit.**



## FINANCIAL ADDITIONALITY

The argument for a project to be financially additional is that a project is not by itself profitable enough and that carbon credits can help in meeting that profitability requirement.



## ENVIRONMENTAL ADDITIONALITY

Environmentally additional projects result in lower levels of emissions than would have otherwise occurred under the business as usual scenario. As long as the project lowers emissions from a baseline, the project is deemed additional.



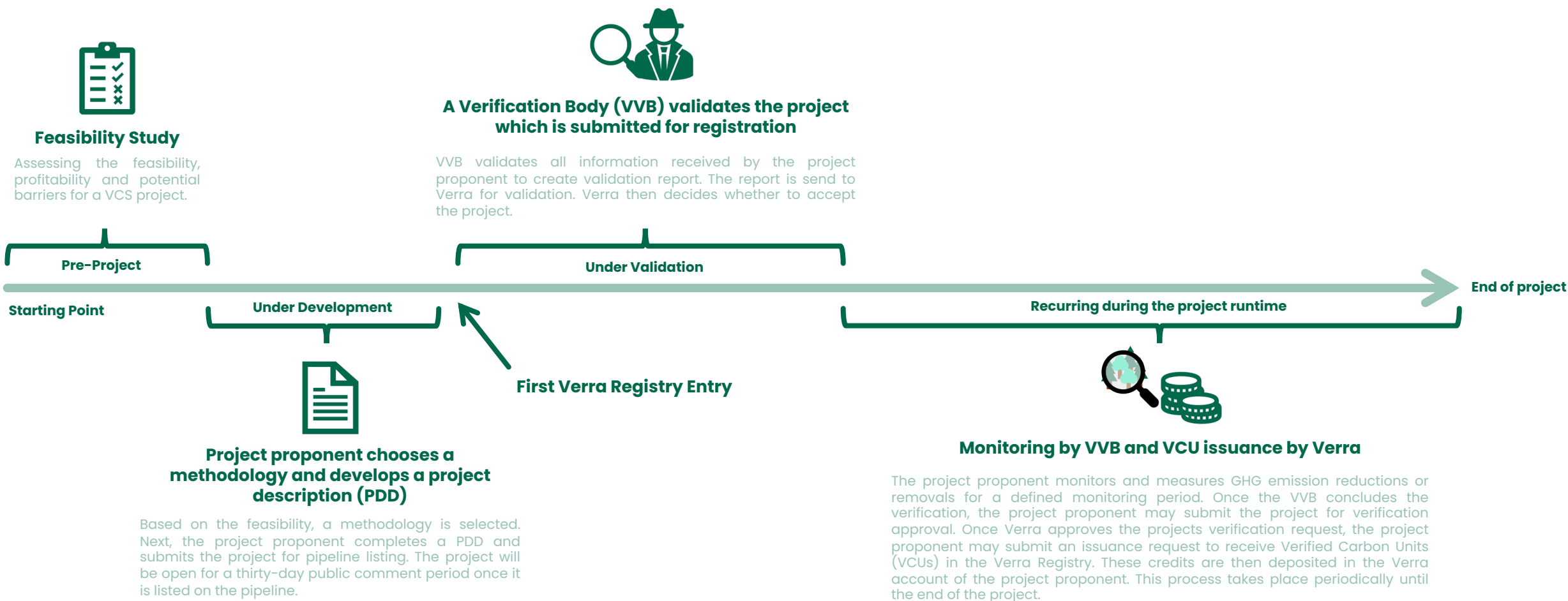
## LEGAL ADDITIONALITY

Legal additionality means that the project goes beyond its host country's climate objectives. If a project only enacts what policies already require, the project may be great for the climate but is not suitable for offsetting.

# DEVELOP A VCS PROJECT



The four major steps in developing a project to generate credible GHG emission removals



# Conference of the Parties (COP)



**Kyoto**  
**1997**

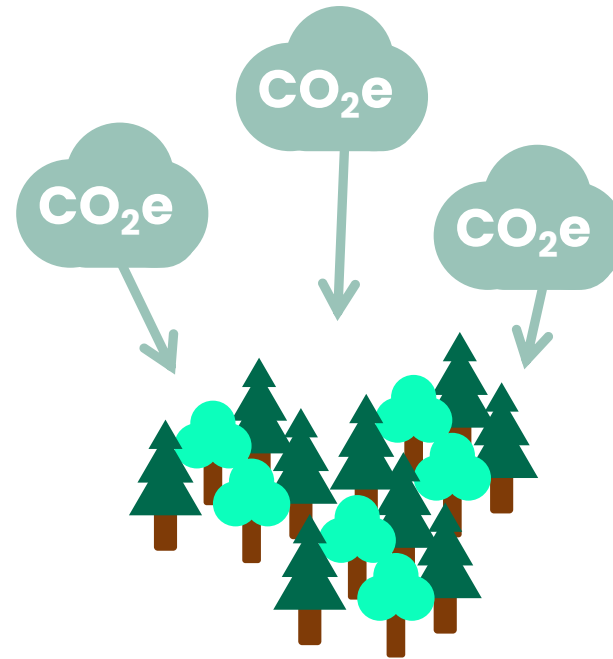


**Paris**  
**2015**



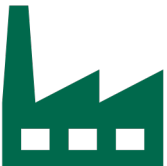
**Glasgow**  
**2021**

# DOUBLE COUNTING



My  
Offset!

CO<sub>2</sub>



No, mine!







# **Kann ein Unternehmer mit deutschen Credits CO2 Neutral wirtschaften?**

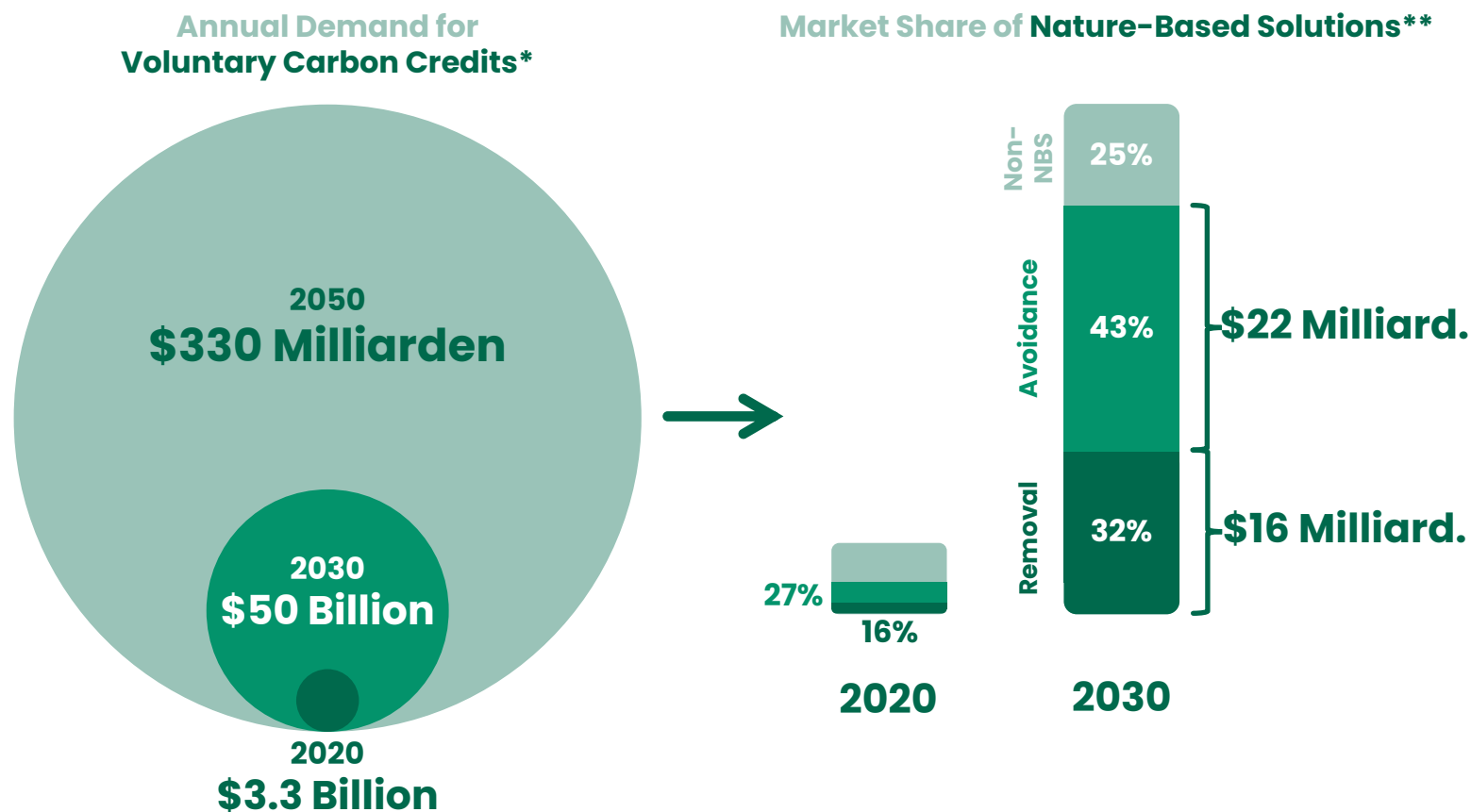
**→**

**FAZIT: Nein!**

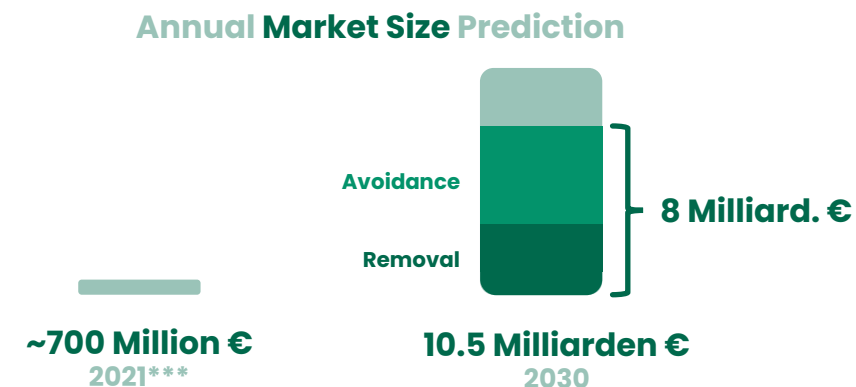
# MARKET POTENTIAL



## Global Market Size



## Example: German Market



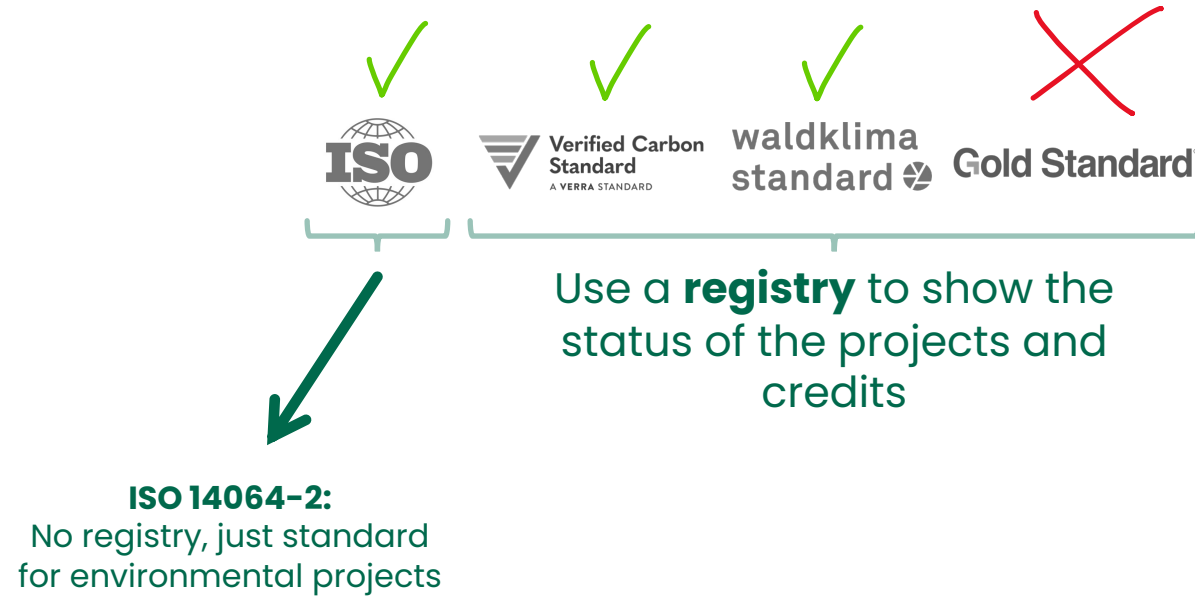
CarbonStack is targeting a 12.5% market share in the German voluntary carbon credit market by 2030. This leads to a credit turnover of 1 Billion €.

\* McKinsey 2021, A blueprint for scaling voluntary carbon markets to meet the climate challenge, Exhibit 2

\*\* Shell & BCG, An outlook on the voluntary carbon market, Chapter 5.2

\*\*\* Estimation based on Credit Volume surveyed by Bundesumweltamt 2022, Infopapier zur Marktanalyse Freiwillige Kompensation 2021

# KONKRET: STANDARDS





### Feasibility Study

Assessing the feasibility, profitability and potential barriers for a project.



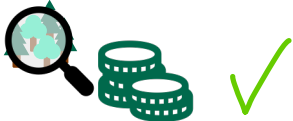
### Project proponent chooses a methodology and develops a project description (PDD)

Based on the feasibility, a methodology is selected. Next, the project proponent completes a PDD and submits the project for pipeline listing. The project will be open for a thirty-day public comment period once it is listed on the pipeline.



### A Verification Body (VVB) validates the project which is submitted for registration

VVB validates all information received by the project proponent to create validation report. The report is sent to in for validation. Verra then decides whether to accept the project.



### Monitoring and issuance by TÜV NORD CERT

# WESTERWALD

## 2021



## 95 ha

Wiederaufforstung geplant bis 2021

Projektvolumen mit Vermarktung im Voraus

# 1,5

Million €

## Rheinland-Pfalz

Schwerpunkt im Westerwald, Kommunalwald

Kreditpreis (1 Tonne CO<sub>2</sub>e)

# <50€

## Projektlaufzeit: 40 Jahre + FSC

<https://forliance.com/climate-solutions/projekt/re-spire-westerwald?lang=de>





### Feasibility Study

Assessing the feasibility, profitability and potential barriers for a project.



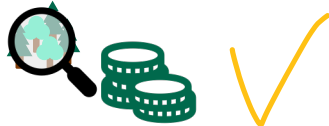
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### Monitoring and issuance by WKS

# HOHER FLÄMING

## 2022



**14 ha**

Wiederaufforstung geplant bis 2022

Projektvolumen mit Vermarktung im Voraus

**0,2**  
Million €

**Brandenburg**

Schwerpunkt in Passow, Privatwald

Kreditpreis (1 Tonne CO<sub>2</sub>e)

**< 60** €

**Projektlaufzeit: 30 Jahre + PEFC**

<https://registry.ecosystemvalue.org/projects>





**Verified Carbon  
Standard**

A VERRA STANDARD



### Feasibility Study

Assessing the feasibility, profitability and potential barriers for a VCS project.



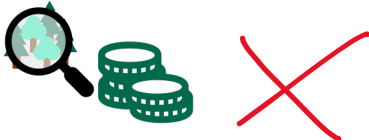
### Project proponent chooses a methodology and develops a project description (PDD)

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### Monitoring and issuance by Verra

# SAUERLAND

## 2023



### 11.000 ha

Wiederaufforstung geplant bis 2030

Projektvolumen mit Vermarktung im Voraus

# 100

Million €

## NRW

Schwerpunkt im Sauerland, Privatwald

Kreditpreis (1 Tonne CO<sub>2</sub>e)

# <40€

### Projektlaufzeit: 30 Jahre + PEFC

