

### The environmental certification of EV cars that you can trust

# BACKGROUND

The electric car is seen as the future of transportation. However, the production of an EV is a highly energy demanding process. The production combined with the usage of the EV makes a large impact on our environment. The production of the car battery especially has a major negative effect on our planet. We think there needs to be a crucial change in the way cars are produced: there needs to be a certain set of requirements and restrictions when producing an EV. We want to show that by enforcing a certification on EVs we will both make manufacturers produce more sustainable cars as well as empower consumers to make the most environmentally friendly choices

# CONCEPT

### 2022

Definition of the requirements for 2022

- · All material and components of the vehicle must be
- 99% sustainable. 75% of all transportation during the product lifecycle must be og emission-75% of all supply chain must be

#### Make the certification public

Attracting stakeholders Founding from governments and private secors

#### Collaborations

- Apply for membership with ISEAL
- 3rd Party certifier INTERTER Bildeleringen/Carpooling

### 2026

Definition of the requirements for 2026

- All material and components of the vehicle must be 99% sustainable
- 99% of all transportation during the product lifecycle must be og emission 85% of all supply chain sustainable

### First certified cars

Income from the companies who want to get the certification

### 2032

Definition of the requirements for 2032

#### Extraction of materials

Mining and extraction of raw materials down to 0%

#### Production

- All the materials used must be
- recyclable Disassemblable batteries
- 100% Green energy used
  100% of supply chain must be
- substaiable

### Car usage

- 0 grams/mile greenhouse gas emission
- The whole lifecycle process must take
   place at the manufacturers site

Recycling process

Reusability

# MFTHODS

We started to look into the technical details and conduct research about electric car batteries to see if we could find any loopholes or improvements that could be made in the current mining, production, usage and recycling processes. We realized that finding a technical solution of a more sustainable EV battery or improving the recycling process is highly complicated and technical. By researching and interviewing we found out that the information about how sustainable EV batteries are is limited, so we decided that we would put our focus on a system that certifies electric vehicles and therefore make consumers more aware of how sustainable an EV is before they purchase it. We performed a competitor study of other kinds of certifications within the transportation industry. We also looked to other sectors to see how they operate, how they are founded, governed, and how they work with third party certifiers etc. This all led to us making the GreenMiles certification website.

Authorized

# vehicles sign-up Companies apply Publishing the requirements Evaluation of vehicles → Notifying the results Certification Requirements set by an independent research institutior 2 years validity Evaluation driven by professionals Companies that follow the irements can sign ι The company has the logo's licence and can use it for selling Some suggestions are made for the companies that don't meet the requirements purposes What is GREENMILES? GREEN MILES All batteries should be used within secondary applications as long as they follow the requirements

# CHALLENGES and SUGGESTIONS

GreenMiles is made with a plan to be growing in size and efficiency within a short period of time, as the problem we are trying to solve is very pressed for time. In the start there might be challenges within funding and in getting recognition from manufacturers and consumers. We need the funding to be able to keep up our work with certificating every two years, and keeping our service at its best. We will suggest solving this by actively searching for funding from environmental nonprofit stakeholders, but we will also try to make collaborations and deals with more profitability focused stakeholders.

A suggestion we have is also that the car manufacturers themselves will only get our certification if they pay us a share, but consequently they would need to meet our strict standards to be able to invest in us and we would need to provide value in return.

We hope we can communicate with consumers and to get recognized as a serious and reliable charity by all stake holders involved. This proves to be a challenge as we know to build repretation will take time, marketing, and building of trust.

## USERS

The GreenMiles certification is aimed towards consumers that are looking into buying an electric vehicle and car manufacturers who are making these vehicles. The manufacturers will want to have the GreenMiles certification on their vehicles to increase their reliability, impression of environmental responsibility and ethical communication toward consumers. The consumers will look towards a vehicle with GreenMiles certification because they want to feel that their purchase is entirerly sustainable.