# Jorga - an environmentally friendly car

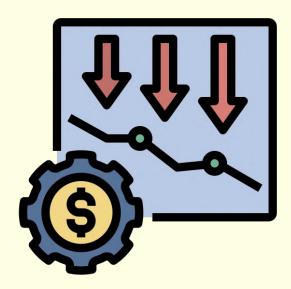
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## The problem

01

Uncompetitiveness of the automotive industry in Kazakhstan



02

Release of toxic gases from machines





# Firstly,

30%

only in such percentage is the automotive industry of Kazakhstan localized

There is domestic

car produce in Kazakhstan

1,5%

the share of the automotive industry in GDP

## Secondly,

### 300 BN tons

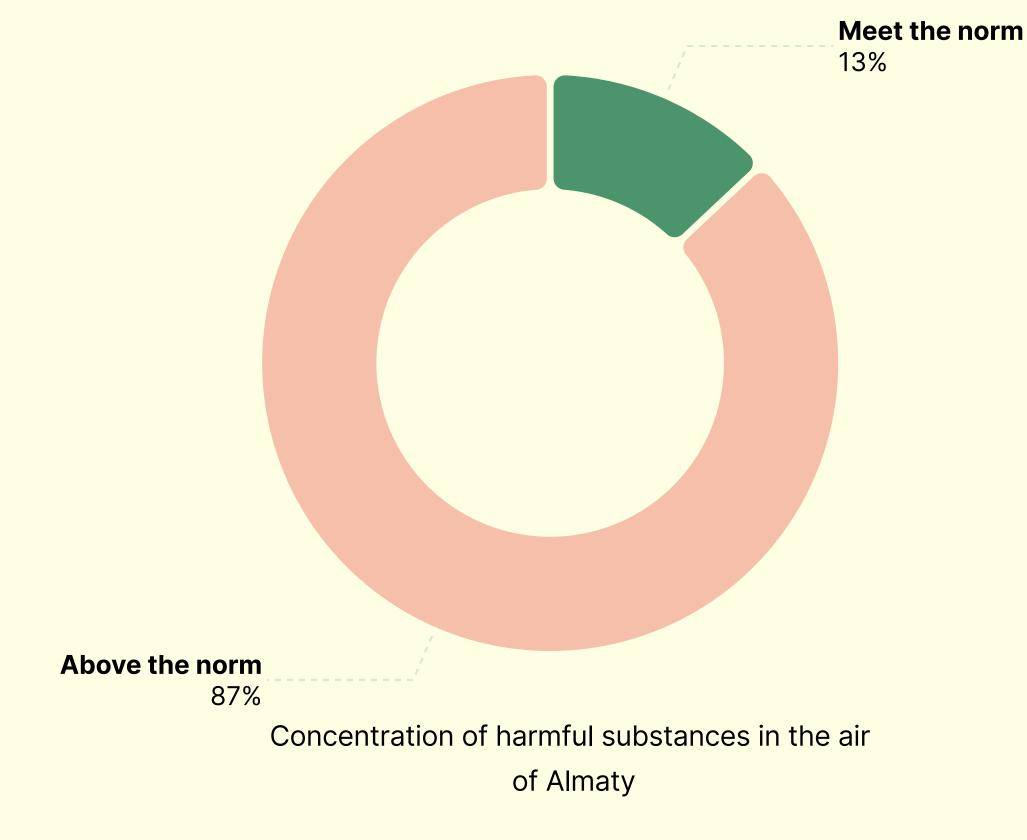
of carbon dioxide is released annually

80% of them are car exhausts

Average annual concentration of harmful substances in air of Almaty is

2,7 - 8,1 times, and the average daily concentration is

**42 times** higher than the norms established by WHO



### Relevance

Our country is on the

20th place in terms of emissions of toxic gases

10th place in terms gas emissions per capita

There is **no car brand** which is fully developed and produced in Kazakhstan

The machine-building industry accounts for only 1,5% of economy



### Purpose

To design a model of environmentally friendly electric transport that develops the country's transport industry and participates in solving the problem of toxic gas emissions into the environment.

#### Research tasks

- To get acquainted with the problems of the machine-building industry in Kazakhstan
- To investigate the problem of toxic gas emissions into the environment of Kazakhstan
- 3 To explore the technology of an environmentally friendly machine

4 To determine the functions of the car

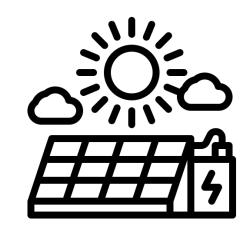
5 To create an initial prototype of the machine



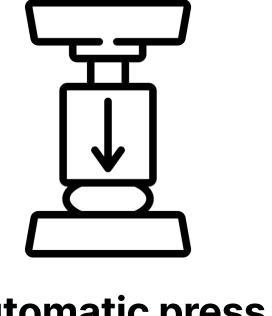
# Jorga -

an environmentally friendly domestic car that is powered by alternative energy sources and does not emit waste into the environment

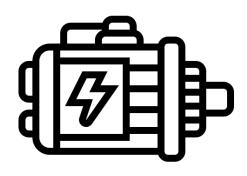
### **Functions**



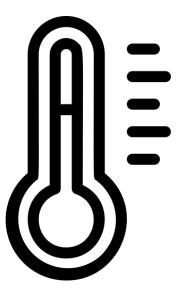
**Solar battery** 



**Automatic press** 

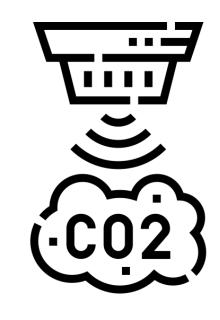


**Electric motor** 



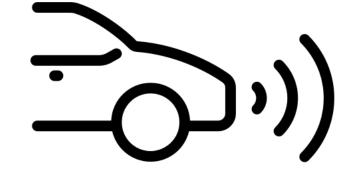
Temperature sensor

### **Functions**



Gas leak sensor

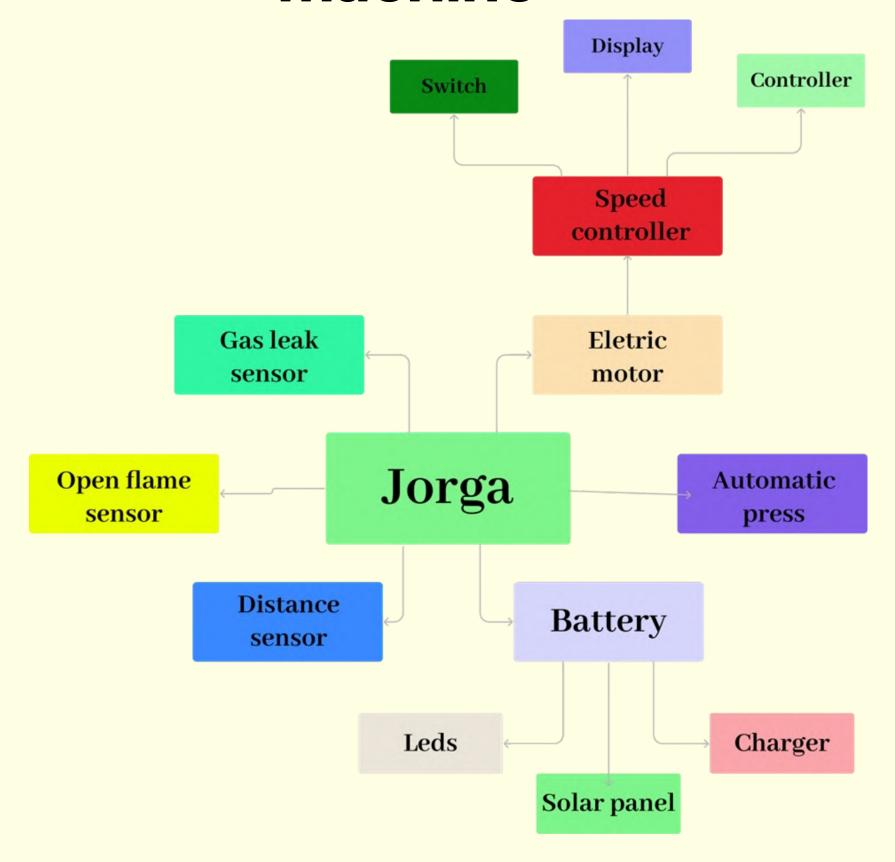


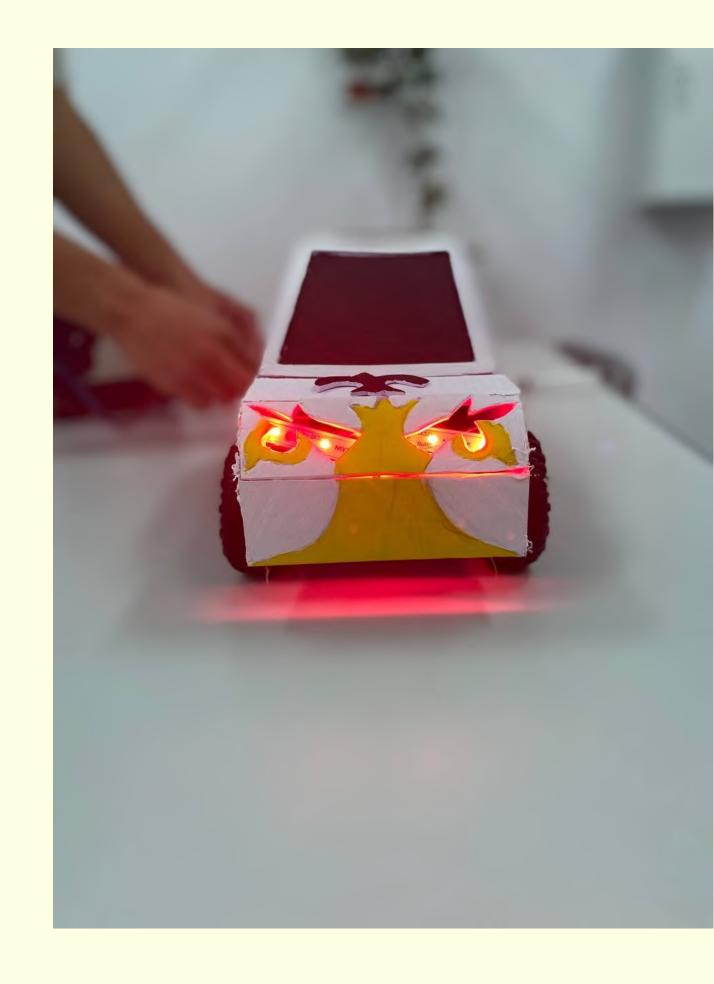


**Open flame sensor** 

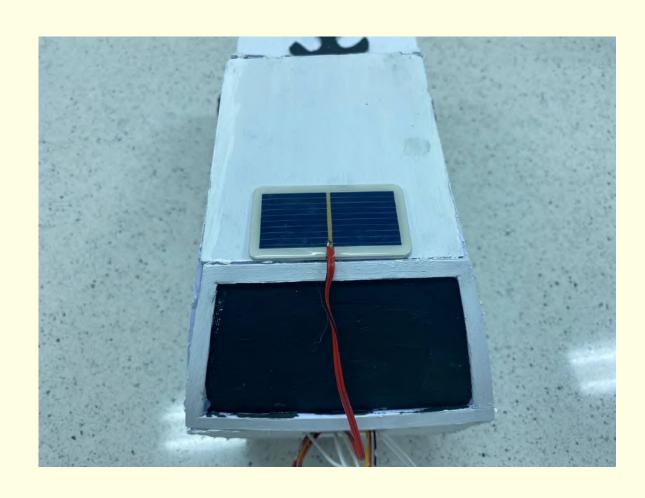
**Distance sensor** 

# The work principle of the machine





# Jorga







**Solar battery** 

**Speed controller** 

**Automatic press** 



# Jorga



Gas leak sensor



**Open flame sensor** 



**Distance sensor** 



**Temperature sensor** 

# Competitor analysis

	Financially affordable	Waste-free product	Use of renewable sources of energy	Automatic press and other functions	High degree of safety	Domestic product
Jorga	+	+	+	+	+	+
Other electrocars	_	+	_		_	
Cars running on natural gas	+	-			_	-

## **SWOT analysis**

#### **Strengths:**

- Environmentally friendly
- High degree of safety
- Domestic product
- Reduced cost

#### Weaknesses:

- Weather dependence
- Motor weakness
- Lack of battery power for a long time

#### **Opportunities:**

- Develops the domestic auto industry
- Reduces the concentration of greenhouse gases in the air
- Decreases the number of road accidents

#### **Threats:**

Competition with traditional cars

### Conclusion

To explore the Kazakh auto industry

To investigate the negative effects of cars to the environment

To provide the solution of the problem

To analyze the competitors

To make an initial prototype



### References



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JORGA

# Thanks for your attention!

### Pitch

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