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✦ THE POWER OF DIGITALIZATION IN  
THE FIGHT AGAINST CLIMATE CHANGE  
FOR AN ECOLOGICAL ENVIRONMENT ✦  
**PROJECT 2025**  
FRANCE



Erasmus+  
Enriching lives, opening minds.



**ASSOCIATION HEXAGONALE**  
de l'Innovation Sociale et de l'Education

STUDENTS: AMNA, ASMA, BILAL, HAIDER, NISANUR  
TEACHERS: MR.BUCHLER , MR.SENHADJI, MRS PONAPIN

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# 01 | INTRODUCTION

- **Pierre Curie middle school:  
a place we know**

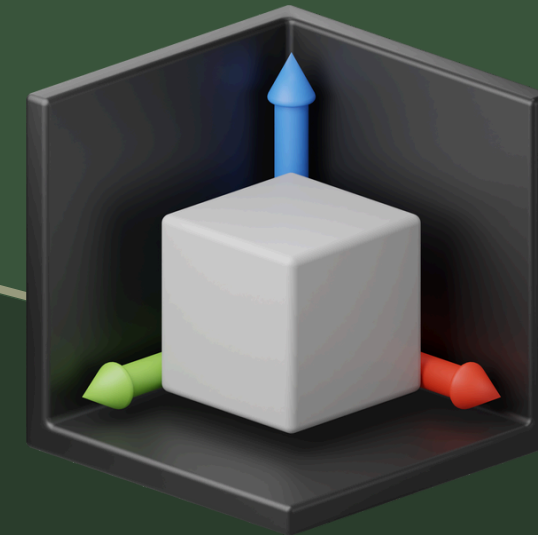
- **The main objective :**

**Find solutions to reduce the ecological footprint**



 Advantages

- Practical use of mathematics
- A realistic model



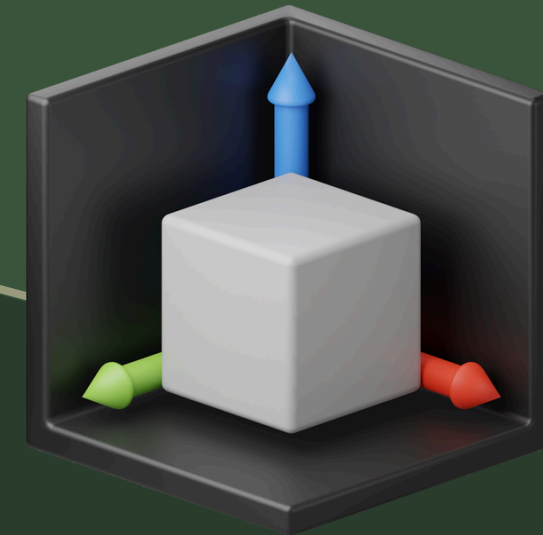
**SketchUp**

 Advantages

- Practical use of mathematics
- A realistic model

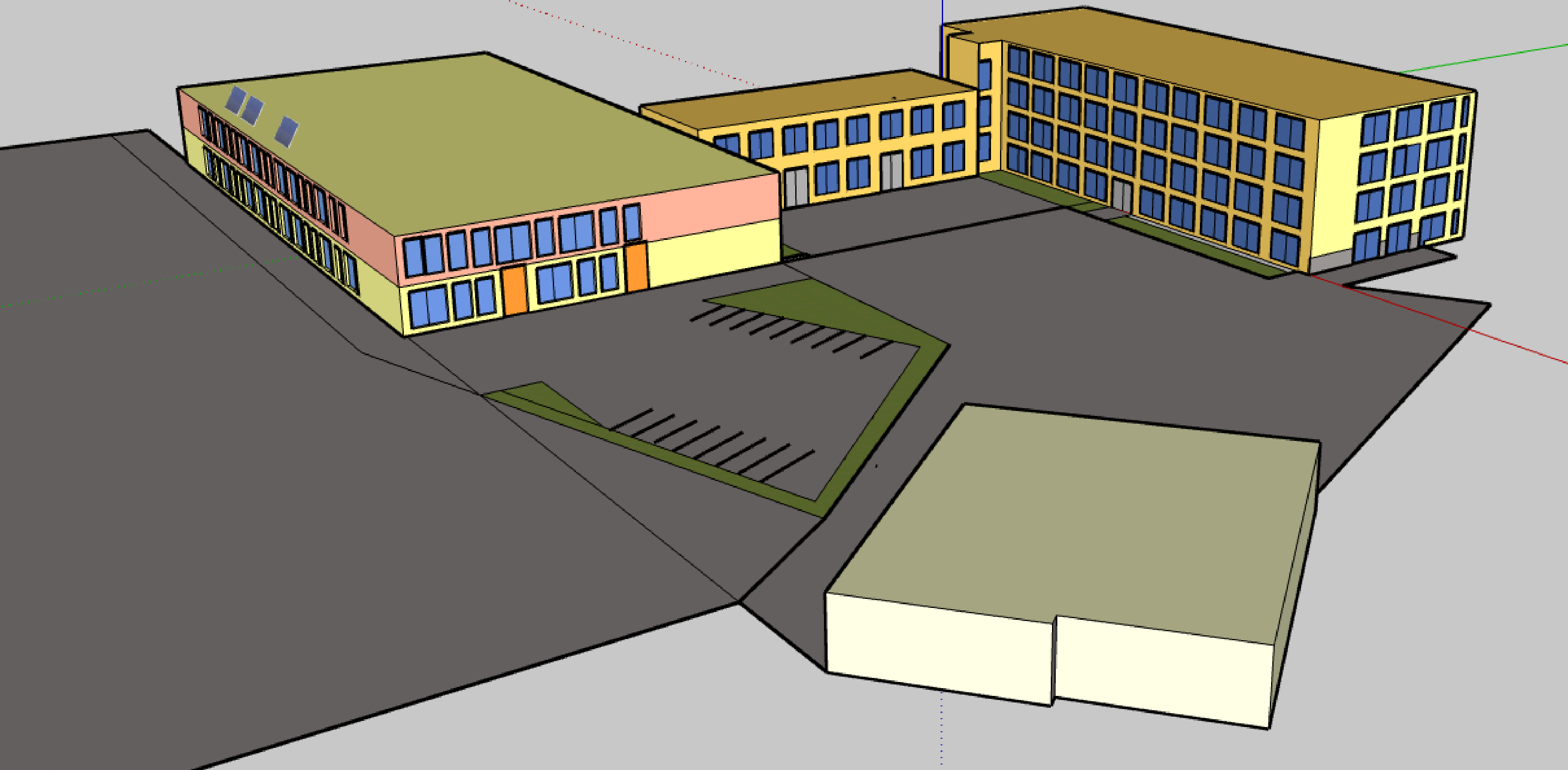
 Disadvantages

- Its interface was not very intuitive
- Measurement tool limitations
- Computers unable to process large files

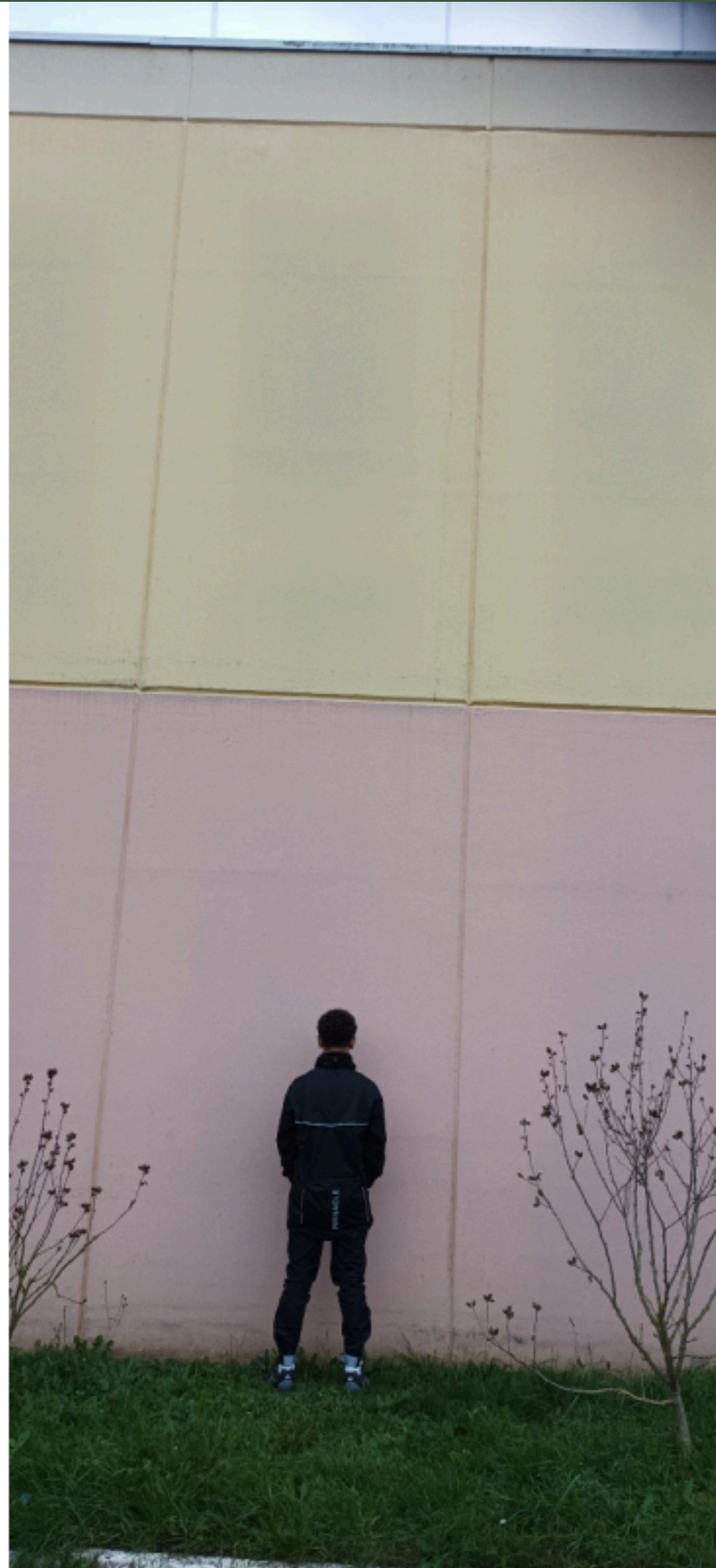


SketchUp

# Our 3D models of the school



# Mesuring the height of the buildings



😊 Advantages

- Aesthetic results
- Collaborative working made easier



😊 Advantages

- Aesthetic results
- Collaborative working made easier

😞 Disadvantage

- Some functionalities not available



 Advantages

- Practical miniature prototype
- Attractive and innovative
- A technology that develops valued skills



**3D printer**

 Advantages

- Practical miniature prototype
- Attractive and innovative
- A technology that develops valued skills

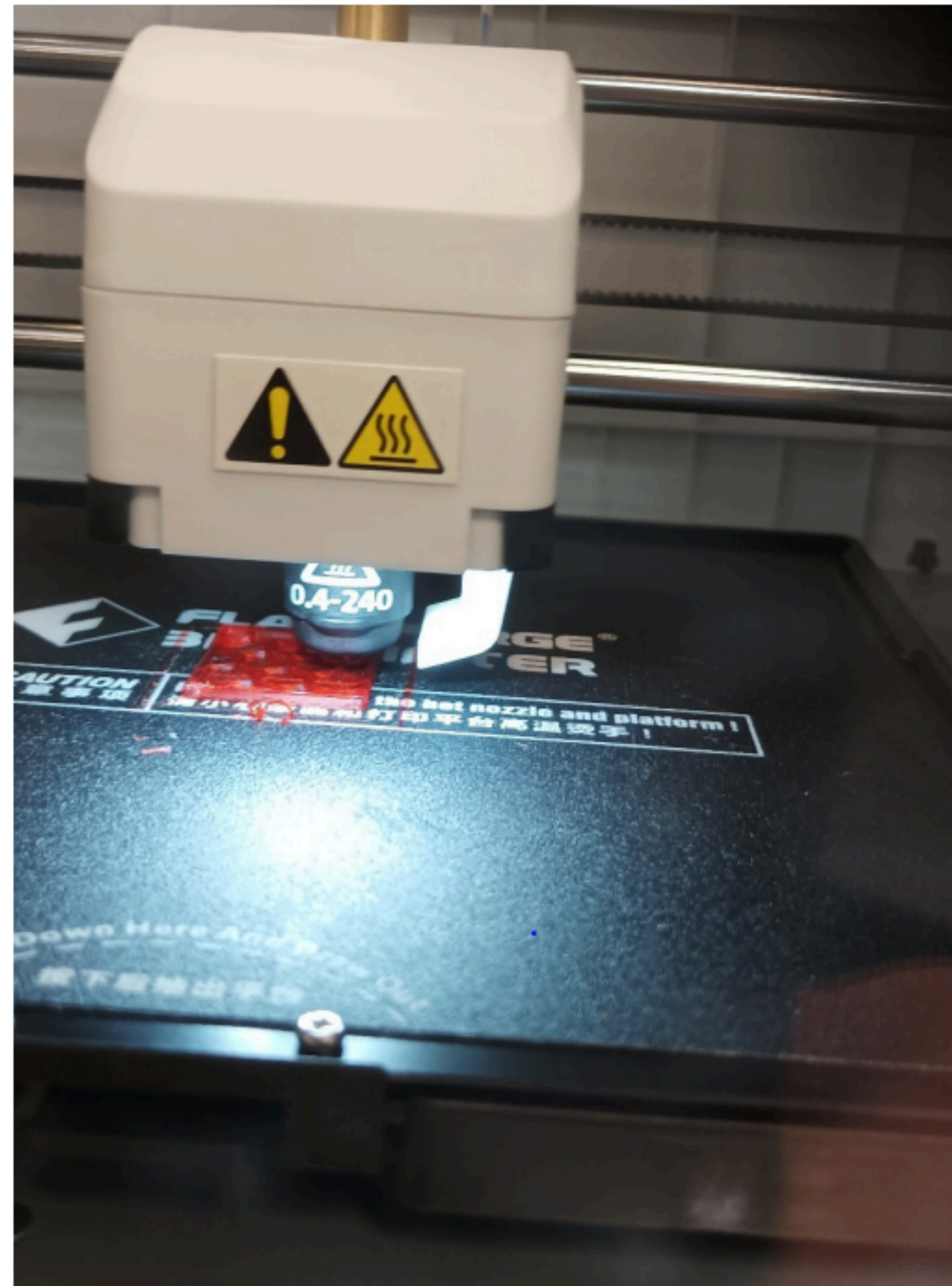
 Disadvantages

- Very long printing time
- Hard to get realistic size

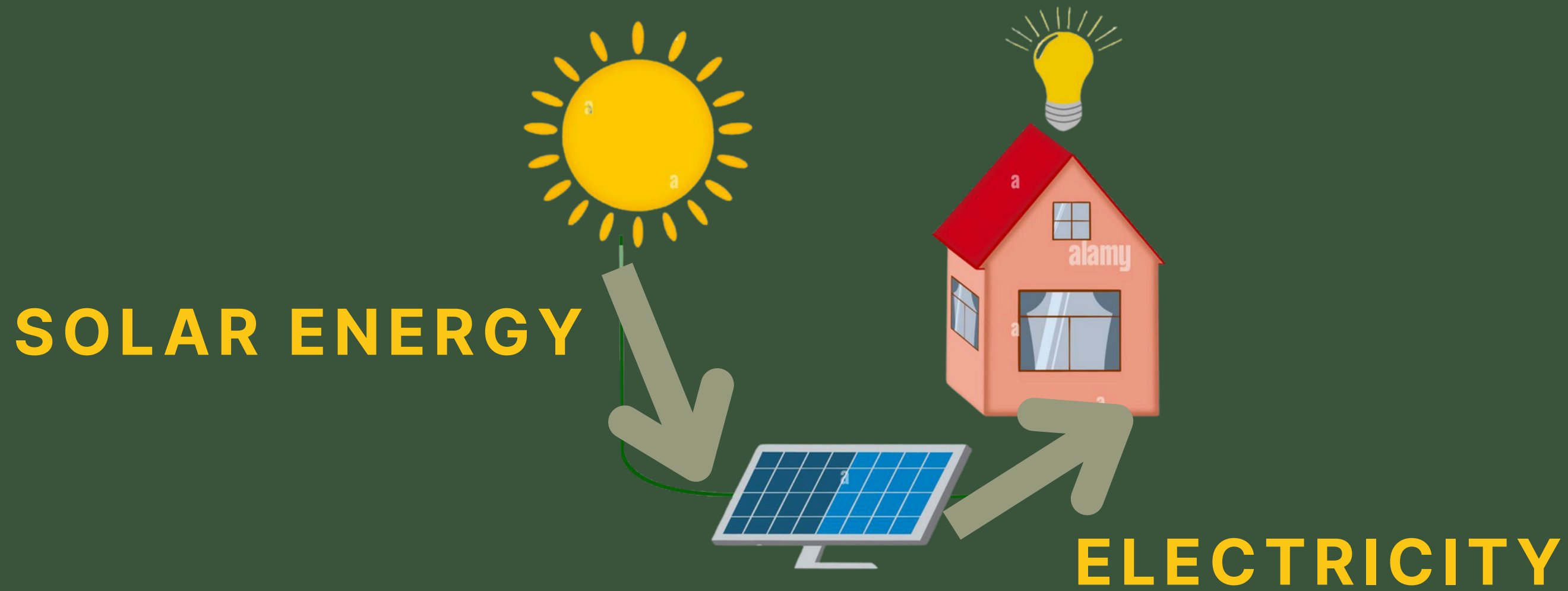


3D printer

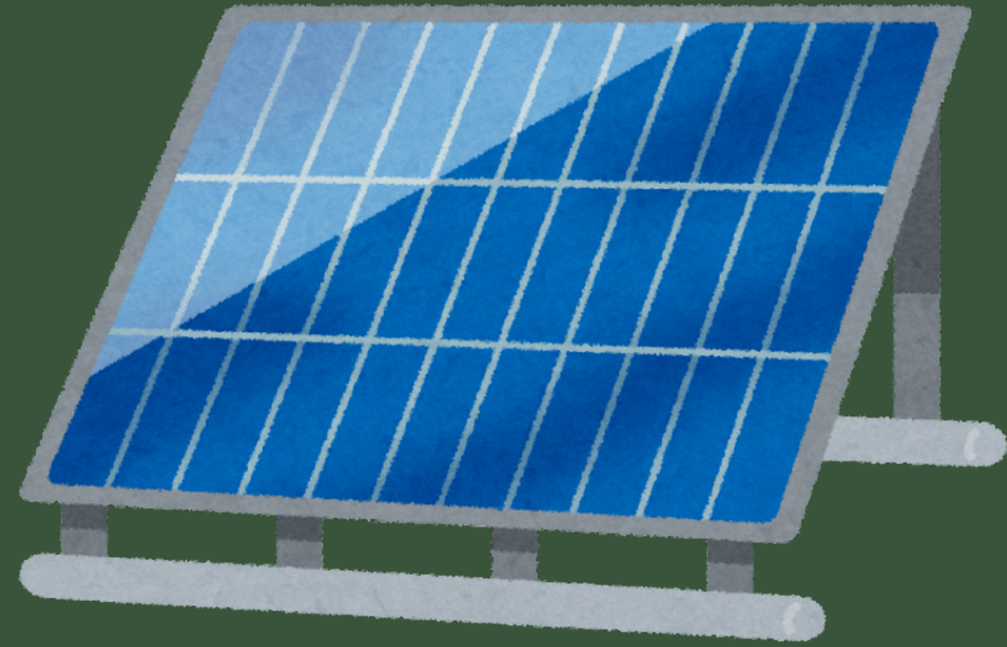
# The 3D Printer in action



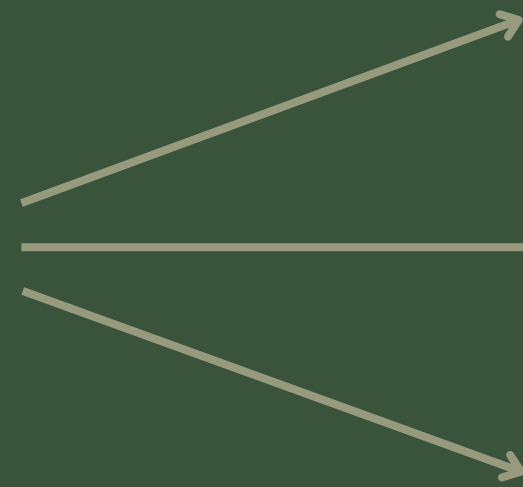
# Installing solar panels



Solar  
panels



**Installing solar panels**



**Produces green energy**



**Profitability**

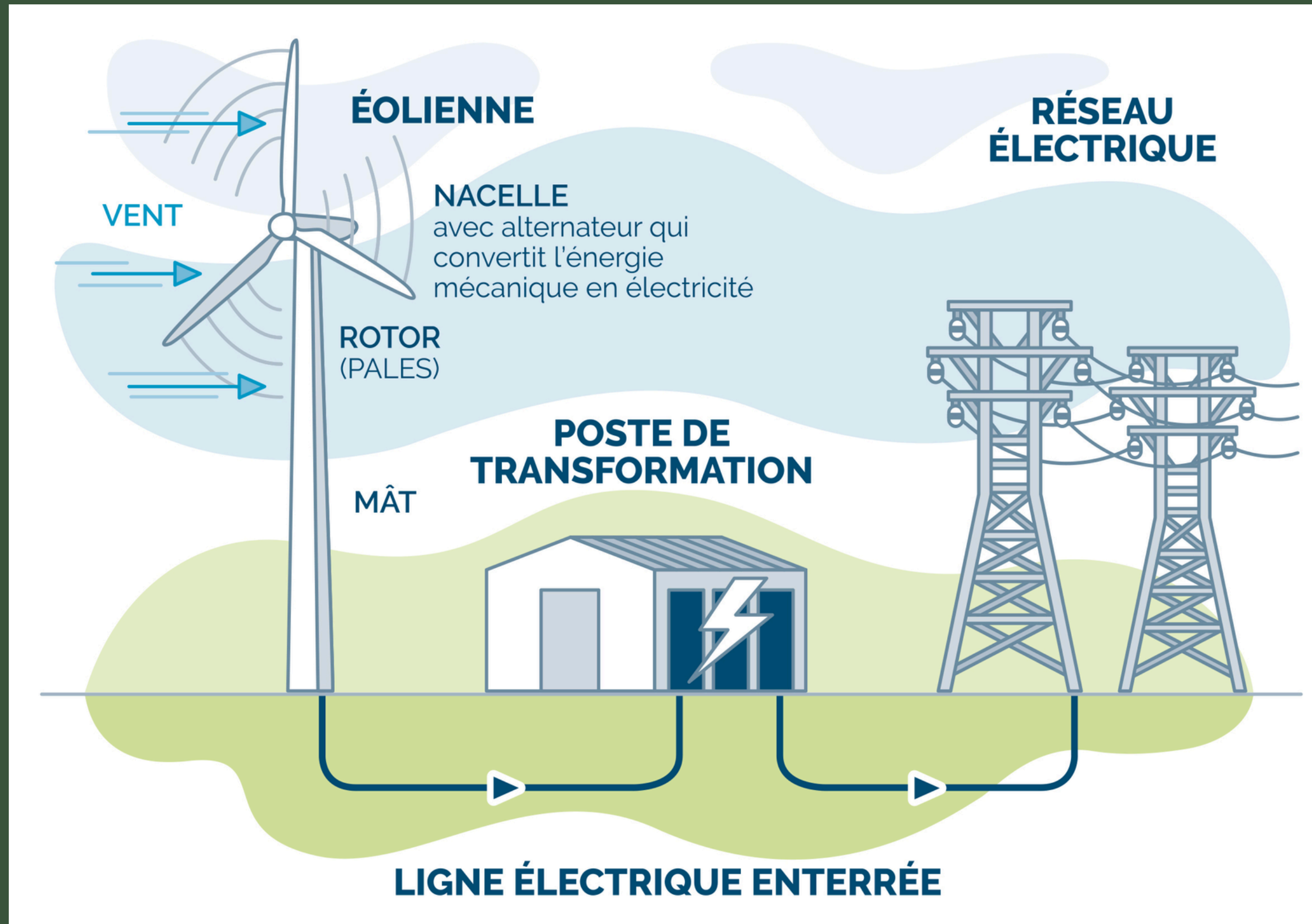


**High costs**



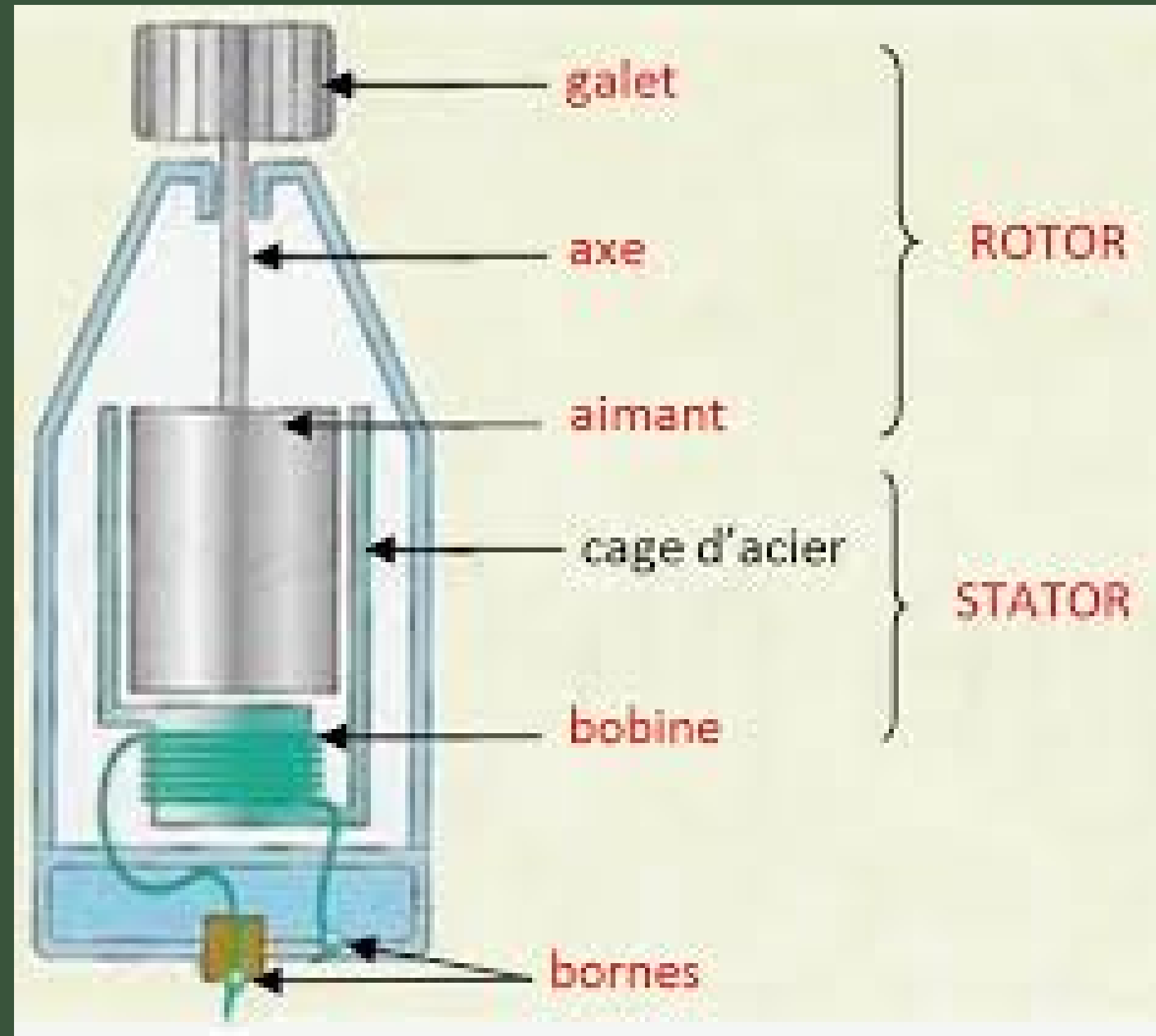
**Solar  
panels**

# Installing wind turbines



Wind  
turbines

# How it works

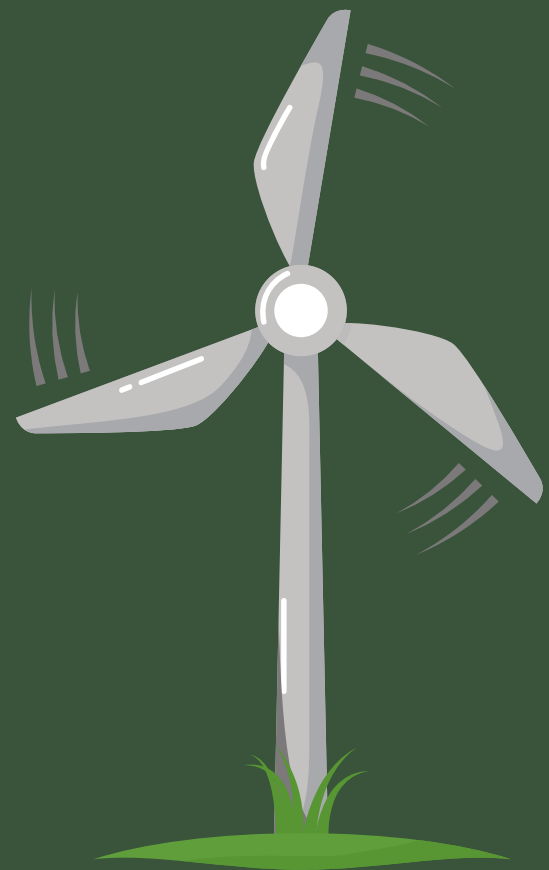


Wind  
turbines

Installing wind turbines

Profitable

Impossible





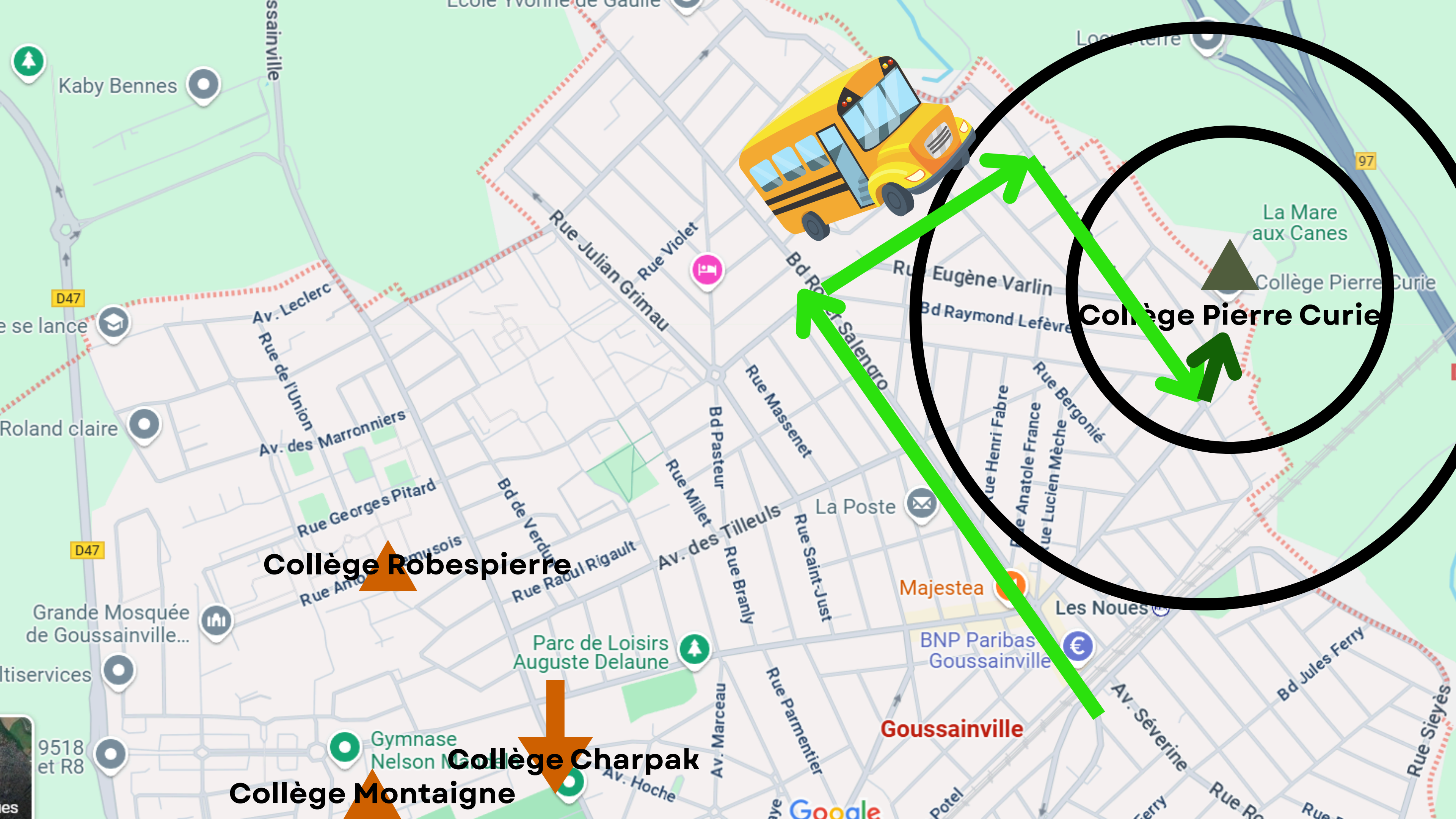
**Low-emission school bus**

**Reduce road traffic**

**Decrease CO2 emissions**

**High costs**

**Ecological school bus**



**Collège Pierre Curie**

**Collège Robespierre**

**Collège Charpak**

**Collège Montaigne**

**Goussainville**

Google

## 04 | GENERAL CONCLUSION

- **Solar panels + circulation of an eco-friendly school bus**
- **An environmentally exemplary middle school.**



# SOURCES

**CEREMA** (Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement)

·  
**Ministère de la transition écologique**

·  
**France renouvelables** (Association for the wind turbines)

·  
**Service public** (About laws in France)

·  
**INES** (National Institute of Solar Energy)

·  
**EDF** (Électricité De France)

*Thank you for listening !*

