



# 5R

## GREEN

## TECHNOLYMPICS



European  
Regional  
Development  
Fund





FOR GREEN TECH FUTURE!



## International Olympiad “5R – Green Technolympics”

The International Technolympics calls participants from five countries:  
Lithuania, Poland, Germany, Denmark, Sweden!

Venue: Aula Magna (Studendų) Klaipėda University, Herkaus Manto 90-1, Klaipėda, Lithuania  
Time: 8-9<sup>th</sup> January, 2020

### AGENDA

#### 8<sup>TH</sup> JANUARY, 2020

8<sup>30</sup> - 9<sup>00</sup> - Registration

9<sup>00</sup> - 9<sup>20</sup> - Welcome words: Rector, Lead partner, Designer

9<sup>20</sup> - 9<sup>30</sup> - Technolympics program overview

9<sup>30</sup> - 10<sup>00</sup> - Ice-breaking

10<sup>00</sup> - 12<sup>00</sup> - Brain battle

*In parallel: 11<sup>00</sup>-13<sup>00</sup> - 2 eco-workshops (in a lobby)*

12<sup>00</sup> - 13<sup>00</sup> - Lunch time

13<sup>00</sup> - 16<sup>00</sup> - 2 rounds of guided tours to companies,

representing 5R

16<sup>00</sup> - 17<sup>00</sup> - Dinner

18<sup>00</sup> - City tour (sightseeing, hosted by youth organisation

“Round table”)

23<sup>00</sup> - Lights off

#### 9<sup>TH</sup> JANUARY, 2020

8<sup>00</sup> - 8<sup>15</sup> - Registration / Coffee

8<sup>30</sup> - 9<sup>00</sup> - Companies present their tasks & questions

9<sup>00</sup> - 10<sup>30</sup> - Tasks & questions solving (5 units)

11<sup>00</sup> - 12<sup>00</sup> - Lunch time

*In parallel: 9<sup>00</sup>- 13<sup>00</sup> - Secondary Raw-Games in*

*Eco-Gaming Corner (in a lobby)*

12<sup>00</sup> - 13<sup>00</sup> - Awards and good bye

13<sup>00</sup> - Departure

# BRAIN BATTLE

5 topics 10 questions

## 5 R –

- refuse;
- reduce;
- repair (re-use);
- recycle;
- replays or
- reject





# Rules:

- Each stage contains 10 questions, each of which you have 1 minute to answer.
- Write the answers (clearly and legibly) on the slips and submit them to the jury for evaluation after each step.
- 1 correct answer = 1 point.
- Questions are not repeated, no extra time is allocated. The use of telephones is strictly prohibited.
- If we spot fraud - minus the scores!



# 1. REFUSE

# REFUSE

## Question 1

**TRUE OR FALSE.**

**If all Germans could do without „coffee to go“, would be felled 4300 fewer trees each year.**



# REFUSE

## Question 2

**What is an alternative to disposable flatware?**





# REFUSE

## Question 3

**What are the benefits of closed cycle management?**





# REFUSE

## Question 4

List 5 reasons why is needed to refuse single-use plastic.



# REFUSE

## Question 5

**What is being written about?  
This means not accepting things,  
that are not the best option for the  
environment.**



# REFUSE

## Question 6

**How much waste will humanity produce per day in 2100?**



# REFUSE

## Question 7

**How much waste per capita is created in Lithuania?**

- a. 1500 kg**
- b. 453 kg**
- c. 1000 kg**
- d. 548 kg**



# REFUSE

## Question 8

**What does it mean a “pollution pays” principle?**



# REFUSE

## Question 9

**What are a problem related to collection and waste recycling from the yellow bin?**





REFUSE

Question 10





ANSWERS

# REFUSE

## Question 1

**True or false.**

**If all Germans could do without „coffee to go“, would be felled 4300 fewer trees each year.**

**Answers:**

**True**



# REFUSE

## Question 2

What is an alternative to disposable flatware?

Answers:

**Sugar cane plastic**



# REFUSE

## Question 3

**What are the benefits of closed cycle management?**

**Answers:**

**Environmental  
protection, economic  
pay off**



# REFUSE

## Question 4

List 5 reasons why is needed to refuse single-use plastic.

## Answers:

**Made from fossil fuels, huge carbon footprint, will still be here in hundreds of years, only a tiny percentage is recycled, leaches toxins into food and drink, causes hormone and disruption and cancers, pollutes our oceans, kills marine animals and birds, enters our food chain.**



# REFUSE

## Question 5

**What is being written about?**

**This means not accepting things, that are not the best option for the environment.**

**Answers:**

**Refuse**



# REFUSE

## Question 6

How much waste will humanity produce per day in 2100?

Answers:

**11 million**





# REFUSE

## Question 7

How much waste per capita is created in Lithuania?

a. 1500 kg

☒ b. 453 kg

c. 1000 kg

d. 548 kg



# REFUSE

## Question 8

What does it mean a “pollution pays” principle?

Answers:

**Producer has to pay for waste treatment or disposed.**



# REFUSE

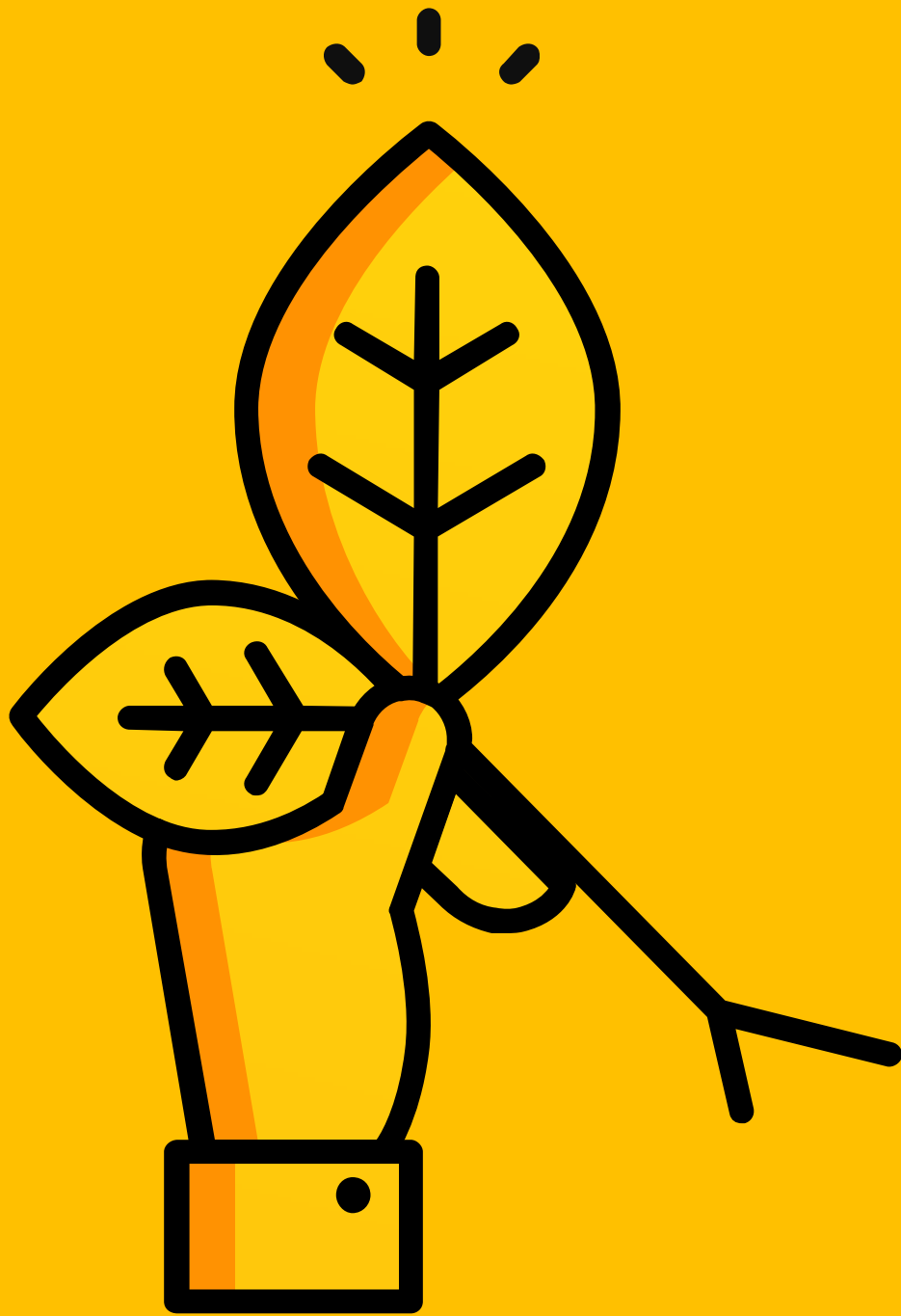
## Question 9

**What are a problem related to collection and waste recycling from the yellow bin?**

**Answers:**

**Financing**





## 2. REDUCE

# REDUCE

## Question 1

**True or false.**  
**Five Polish students created an App Nextplease for free book exchange.**



# REDUCE

## Question 2

**What is the most effective way to reduce waste?**



# REDUCE

## Question 3

**What are the most effective ways that you can save natural resources, protect the enviroment and save the money?**





# REDUCE

## Question 4

**List 5 benefits of reducing and reusing.**



# REDUCE

## Question 5

**What is being written about?  
This will help to protect  
valuable resources.**



# REDUCE

## Question 6

**What is the  
“Digital postbox”**



# REDUCE

## Question 7

What percentage of Lithuanians care about using organic products?

- a. 25 %
- b. 50 %
- c. 75%
- d. 100 %



# REDUCE

## Question 8

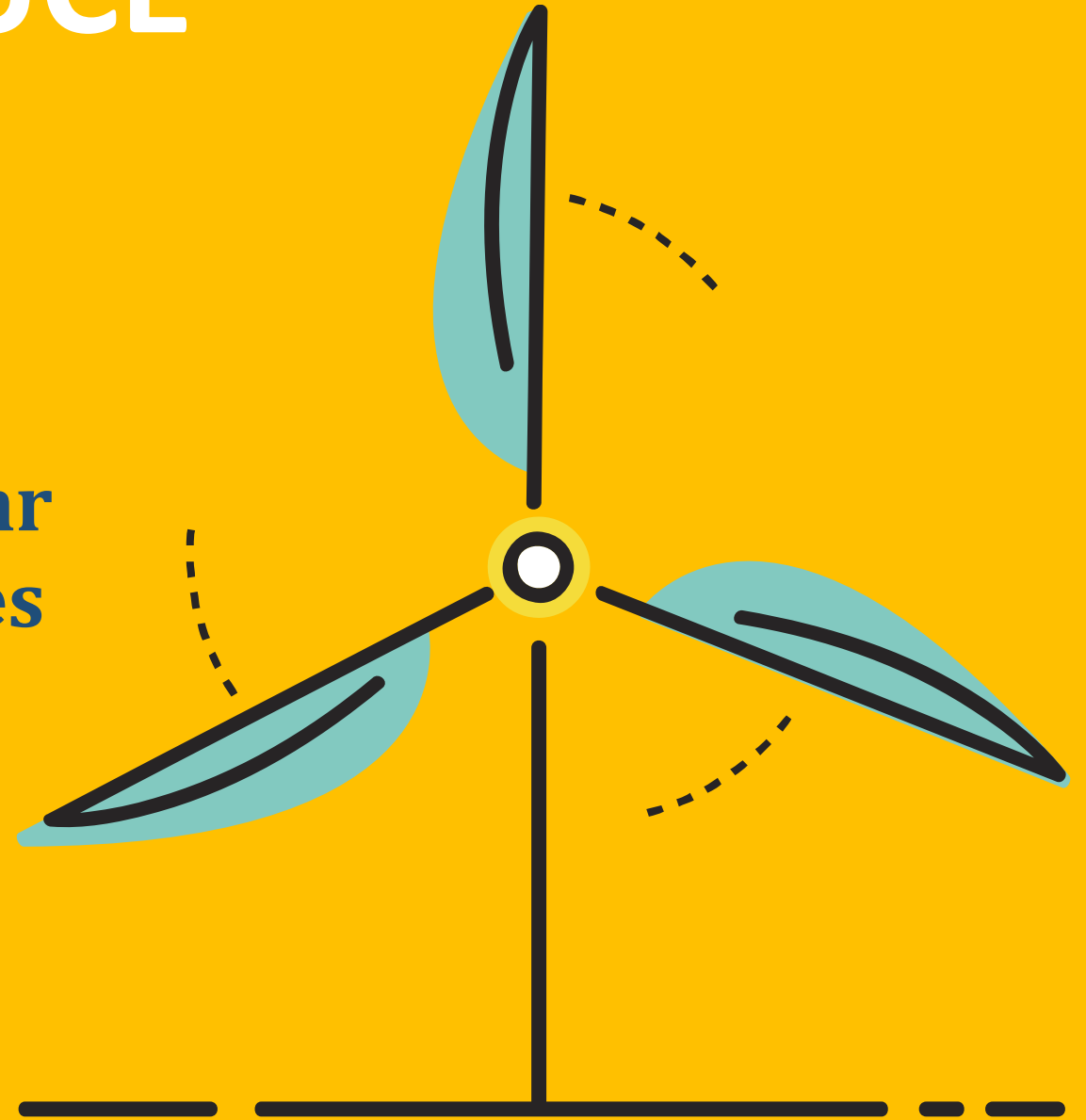
**If You stack the bottles of shampoo used by German's consumers, what it would look like?**



# REDUCE

## Question 9

**How many times per 10 year period Danish wind turbines had seted a record?**





# REDUCE

## Question 10





ANSWERS

# REDUCE

## Question 1

**True or false.**

**Five Polish students created an App Nextplease for free book exchange.**

**Answers:**

**False, only two students created an App**



# REDUCE

## Question 2

What is the most effective way to reduce waste?

Answers:

**Not to create it**



# REDUCE

## Question 3

What are the most effective ways that you can save natural resources, protect the environment and save the money?

Answers:

**Reduction and reuse**



# REDUCE

## Question 4

List 5 benefits of reducing and reusing.

## Answers:

Save energy, prevents pollution, reduces greenhouse gas emissions, helps sustain the environment, save money, reduce the amount of waste that will need to be recycled, allows products to be used to their fullest extent



# REDUCE

## Question 5

What is being written about?  
This will help to protect valuable  
resources.

Answers:

**REDUCE**



# REDUCE

## Question 6

What is the “Digital postbox”

Answers:

**Is a free service which enables citizens to receive all important documents and letters from the government and some business (ex. Banks) digitally.**



# REDUCE

## Question 7

What percentage of Lithuanians care about using organic products?

a. 25 %

b. 50 %

☒ c. 75%

d. 100 %





# REDUCE

## Question 8

If You stack the bottles of shampoo used by German's consumers, what it would look like?

Answers:

**Like a tower of the same height as Cheops pyramid.**



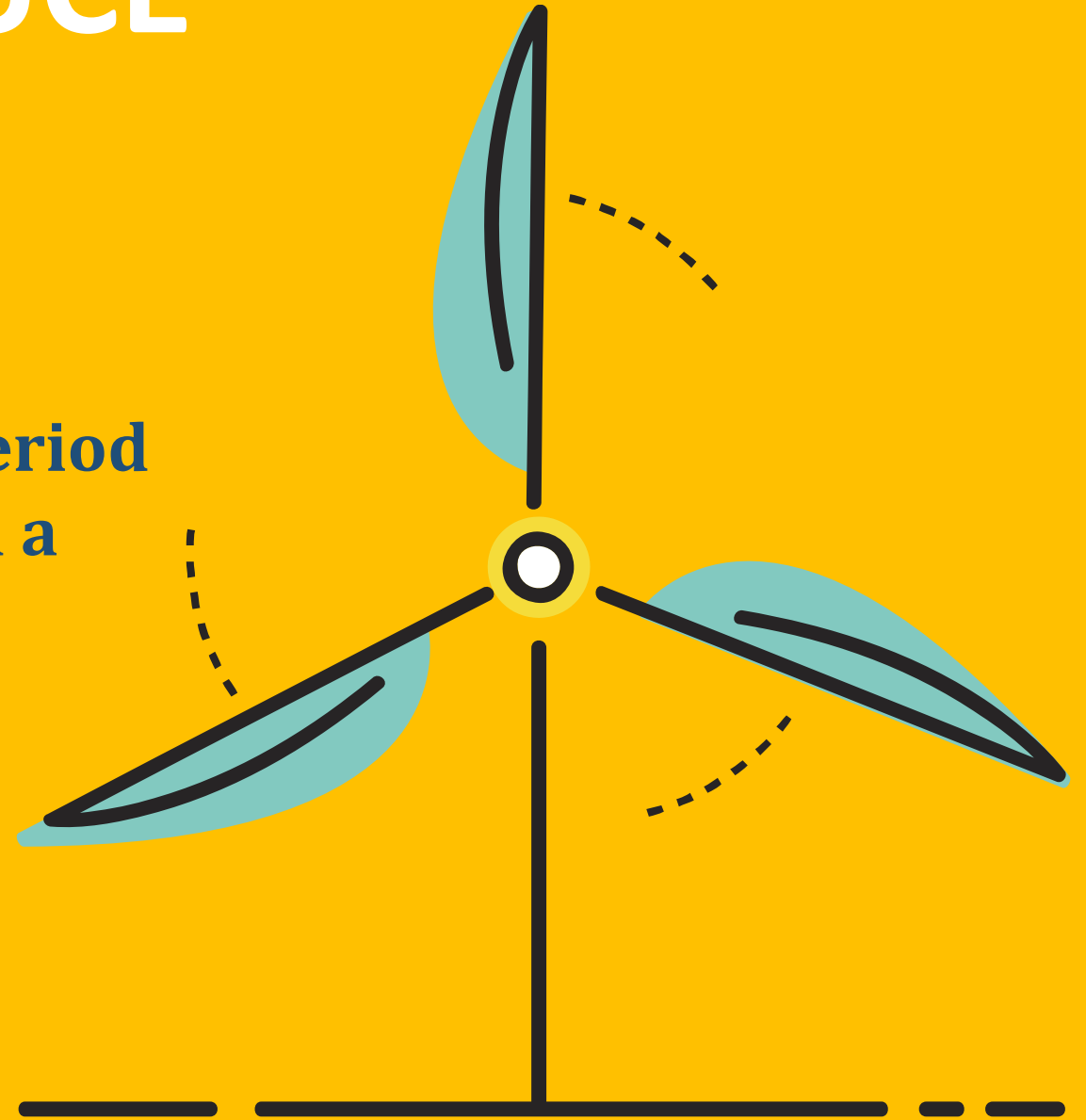
# REDUCE

## Question 9

How many times per 10 year period  
Danish wind turbines had seted a  
record?

Answers:

**9 times.**





# REDUCE

Question 10

Answers:



## 3. REPAIR

# REPAIR

## Question 1

**True or false.**  
In Denmark is more than 1062 shops which only offers clothes from reuse.



# REPAIR

## Question 2

**What components  
are included in  
reuse?**



# REPAIR

## Question 3

# How many jobs creates the reuse of every 10 000 tons of material disposed by Microsoft?



# REPAIR

## Question 4

**List 5  
environmental  
benefits of reuse.**





# REPAIR

## Question 5

**What is being written  
about?  
This will extend its life.**



# REPAIR

## Question 6

**What are the benefits of reuse projects for community?**



# REPAIR

## Question 7

**How many tons of clothes are donated per year in germany?**

- a.10 tons**
- b.100 tons**
- c.10 000 tons**
- d.100 000 tons**



# REPAIR

Question 8

**What is the date of reuse day?**

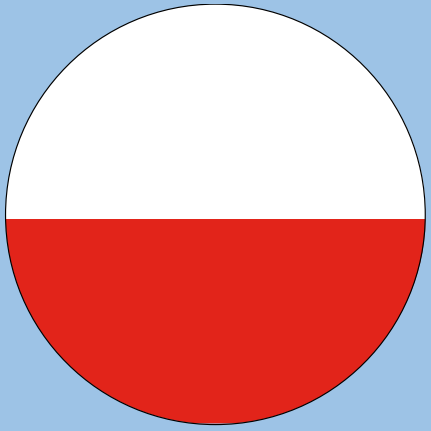


# REPAIR

## Question 9

**What is the second best option in waste management (after reducing)?**





# REPAIR

## Question 10



ANSWERS

# REPAIR

## Question 1

**True or false.**

In Denmark is more than 1062 shops which only offers clothes from reuse.

Answers:

**True**





# REPAIR

## Question 2

**What components are included in reuse?**

**Answers:**

**Preparing for reuse  
and reuse**



# REPAIR

## Question 3

# How many jobs creates the reuse of every 10 000 tons of material disposed by Microsoft?

## Answers:

296



# REPAIR

## Question 4

**List 5 environmental benefits of reuse.**

**Answers:**

**Reduction of the amount waste, pollution prevention, reduction of greenhouse gas emissions, decreased strain on natural resources, preservation on the „embodied energy“**



# REPAIR

## Question 5

**What is being written about?  
This will extend its life.**

**Answers:**

**Reuse or Repair**



# REPAIR

## Question 6

**What are the benefits of reuse projects for community?**

**Answers:**

**It helps to create community cohesion**



# REPAIR

## Question 7

How many tons of clothes are donated per year in germany?

- a.10 tons
- b.100 tons
- c.10 000 tons
- d.100 000 tons



# REPAIR

## Question 8

**What is the date of reuse day?**

Answers:

**20 of October**



# REPAIR

## Question 9

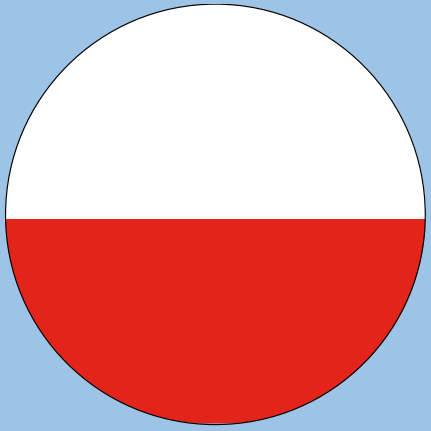
**What is the second best option in waste management (after reducing)?**

**Answers:**

**Re-using**







# REPAIR

## Question 10

### Answers:



## 4. RECYCLE

# RECYCLE

## Question 1

**True or false.**

**Sweden use 10 % of its waste to produce energy which is used to heat more then one million houses**



# RECYCLE

## Question 2

**Why is recycling important?**



# RECYCLE

## Question 3

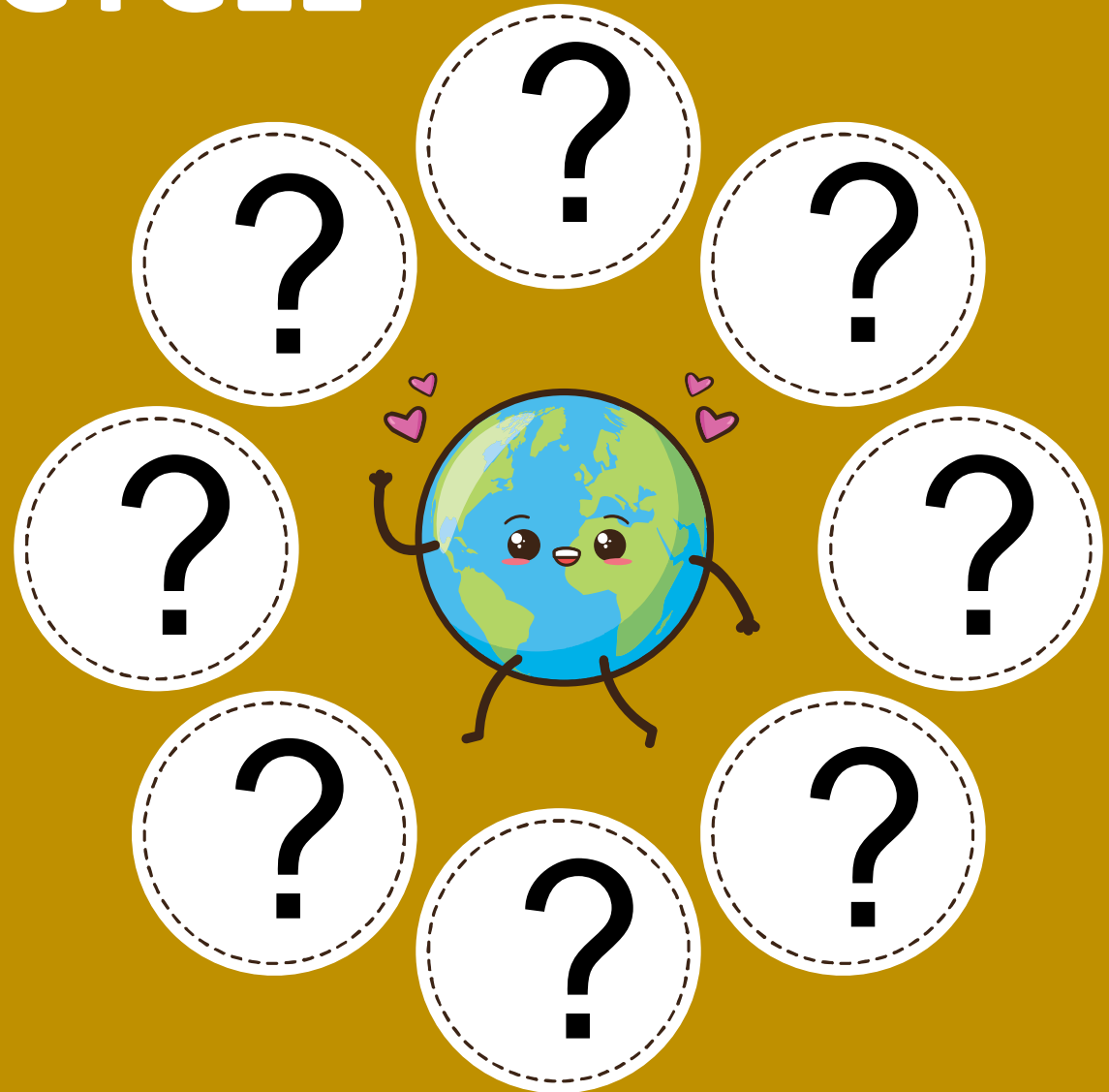
**For what purpose  
the steel in metal  
packaging can be  
used?**



# RECYCLE

Question 4

**List 5 benefits  
of recycling.**



# RECYCLE

## Question 5

**What is being written about?**

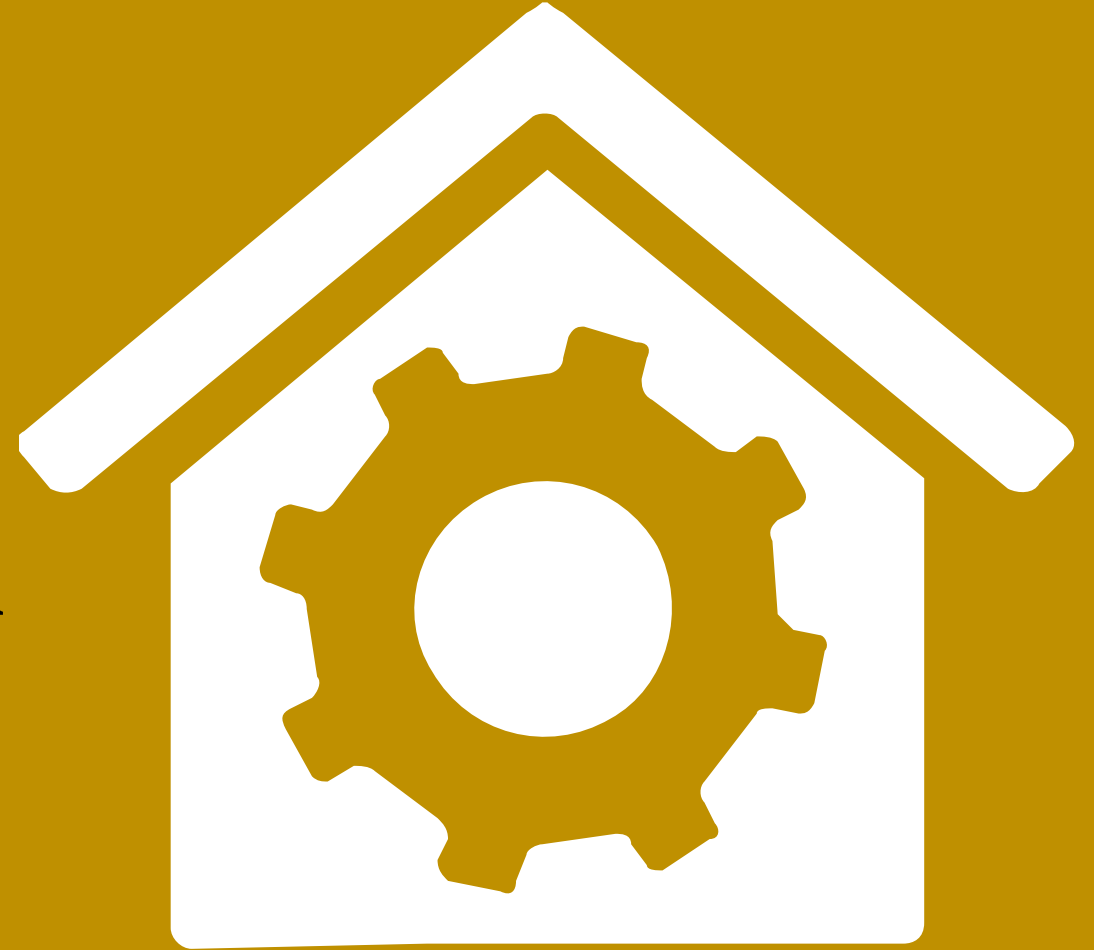
**Any recovery operation taking place after collections and by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes.**



# RECYCLE

## Question 6

**How it is called materials recovery facility which will be used to form new products?**





# RECYCLE

## Question 7

**How many household waste went to material recycling in Sweden?**

- a. 1 617 640 tonnes**
- b. 10 tonnes**
- c. 1 589 tonnes**
- d. 2 000 000 000 tonnes**



# RECYCLE

## Question 8

**Which country is responsible for 30 per cent of worldwide plastic ocean pollution?**



# RECYCLE

## Question 9

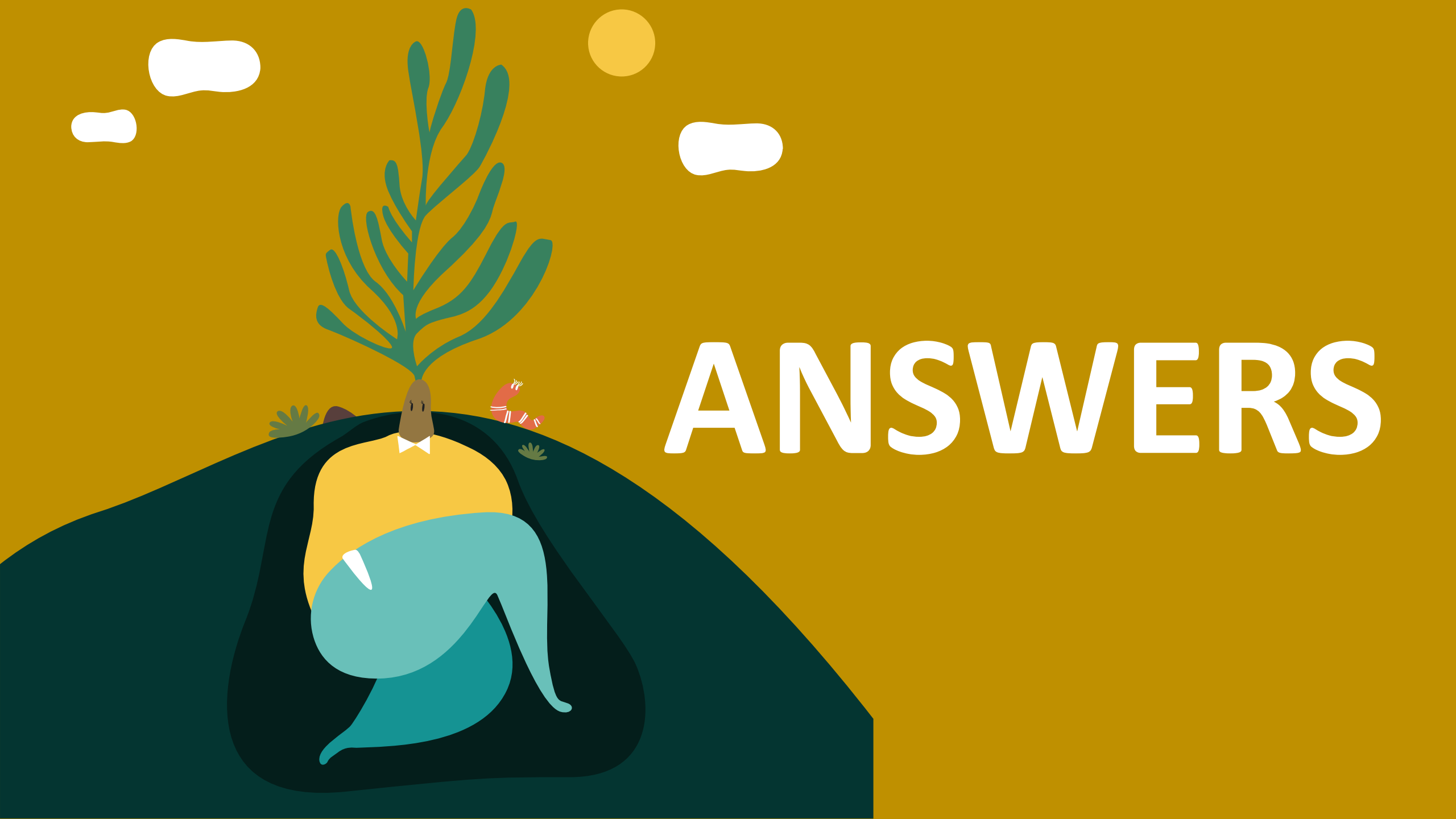
**How much ever produce plastic is still in the environment?**





**RECYCLE**

Question 10



ANSWERS

# RECYCLE

## Question 1

**True or false.**

Sweden use 10 % of its waste to produce energy which is used to heat more then one million houses

**Answers:**

**False, they used 50% waste**



# RECYCLE

## Question 2

**Why is recycling important?**

**Answers:**

**Recycling reduces the amount of waste that is landfilled or incinerated and secures that waste material, after being transformed, forms parts in manufacturing new products ....**



# RECYCLE

## Question 3

**For what purpose the steel in metal packaging can be used?**

**Answers:**

**Rail rails**





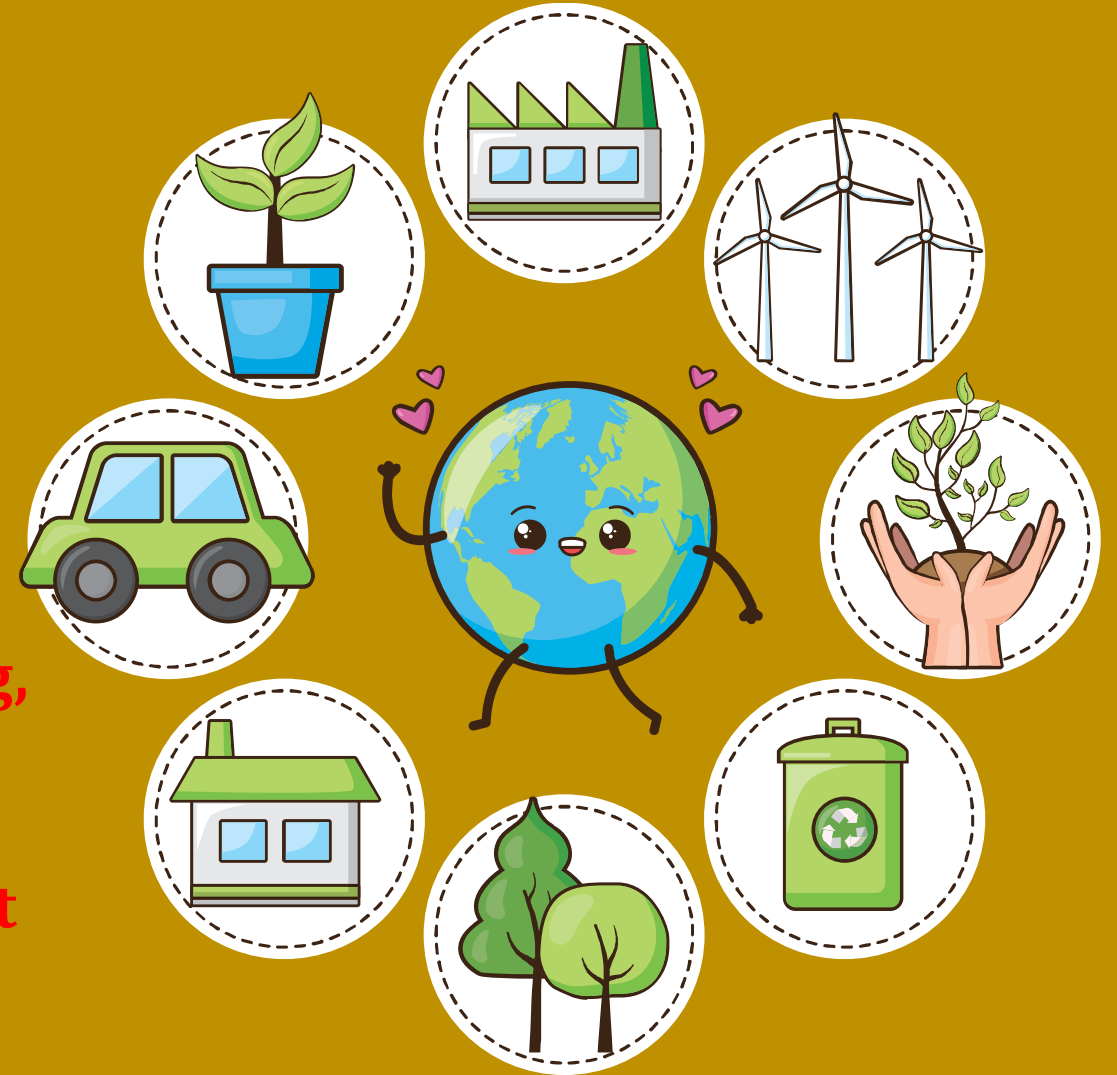
# RECYCLE

## Question 4

List 5 benefits of recycling.

## Answers:

Reduce the amount of waste, resources lost in landfills, to collect new raw materials, prevents pollution by reducing, save energy needed to make new products, reduces greenhouse gas emissions, helps sustain the environment for future generations, helps create new well-paying jobs



# RECYCLE

## Question 5

**What is being written about?**

**Any recovery operation taking place after collections and by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes.**

**Answers:**

**Recycle**



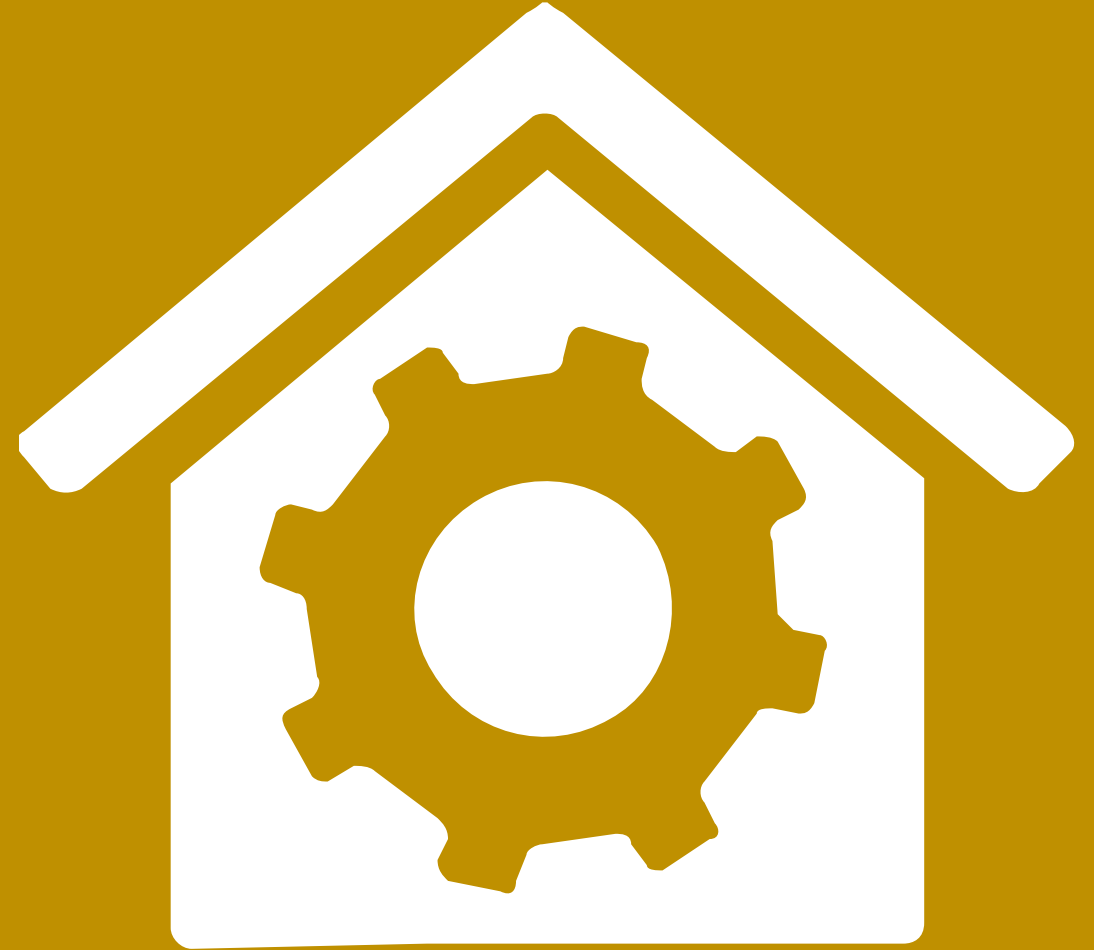
# RECYCLE

## Question 6

**How it is called materials recovery facility which will be used to form new products?**

**Answers:**

**Recyclate**



# RECYCLE

## Question 7

How many household waste went to material recycling in Sweden?

- a. 1 617 640 tonnes
- b. 10 tonnes
- c. 1 589 tonnes
- d. 2 000 000 000 tonnes



# RECYCLE

## Question 8

Which country is responsible for 30 per cent of worldwide plastic ocean pollution?

Answers:

**China**



# RECYCLE

## Question 9

How much ever produce plastic is still in the environment?

Answers:

**76 per cent**





# RECYCLE

Question 10

Answers:



# 5. Replays or reject



# Replays or reject

## Question 1

**True or false.**

**In Denmark each year,  
the Red Cross receives  
more than 6000 tons of  
recycled clothing.**



# Replays or reject

## Question 2

**What kind of supply chain is appropriate for rebuy process?**



# Replays or reject

## Question 3

How it is called a  
**popular way to heat  
organic waste?**



# Replays or reject

## Question 4

**List 5 benefits of replace or rebuy.**



# Replays or reject

## Question 5

**What is being written about? To substitute a thing that is broken or inefficient or no longer working for another.**



# Replays or reject

Question 6

**What is activy?**



# Replays or reject

## Question 7

**Which year Denmark wake of the first Organic Action Plan.**

- a. 2015**
- b. 2005**
- c. 2000**
- d. 1995**



# Replays or reject

## Question 8

**Why buying locally produced goods and services is good for environment?**





# Replays or reject

## Question 9

**What products  
can carry the  
organic logo?**





# Replays or reject

Question 10



ANSWERS

# Replays or reject

## Question 1

**True or false.**

**In Denmark each year, the Red Cross receives more than 6000 tons of recycled clothing.**

**Answers:**

**True**



# Replays or reject

## Question 2

What kind of supply chain is appropriate for rebuy process?

Answers:

**From farm to fork**



# Replays or reject

## Question 3

How it is called a popular way to heat organic waste?

Answers:

**Vermicompost**



# Replays or reject

## Question 4

List 5 benefits of replace or rebuy.

Answers:

**Rent instead of buying, choose environmentally friendly alternatives if available, replace paper towels with hand-dryers or cloth towels, use durable items, use water based paints instead of solvent based paints.**



# Replays or reject

## Question 5

What is being written about? To substitute a thing that is broken or inefficient or no longer working for another.

Answers:

**Replay**





# Replays or reject

## Question 6

# What is activy?

# Answers:

**The first mobile game to reward cycling in the city. The solution is not only healthy but also ecological, because the more people switch to two-wheelers, the less exhaust fumes will get into our air.**

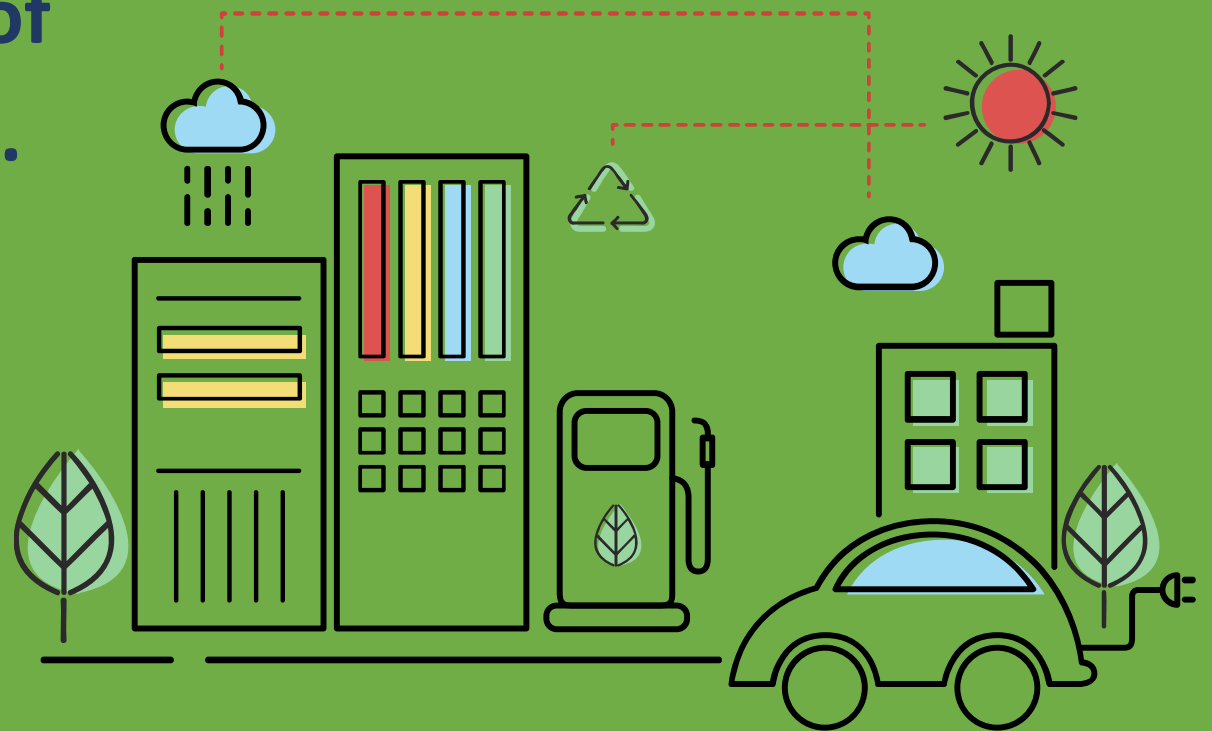


# Replays or reject

## Question 7

Which year Denmark wake of the first Organic Action Plan.

- a. 2015
- b. 2005
- c. 2000
- ☒ d. 1995



# Replays or reject

## Question 8

Why buying locally produced goods and services is good for environment?

Answers:

**Because you can reduce transportation emissions and costs.**



# Replays or reject

## Question 9

What products can carry the organic logo?

Answers:

**Products that consist of 95 per cent or more of the ingredients from organic farming**





# Replays or reject

Question 10

Answers: