

# Environmental Innovators



Teacher Guidebook 2023-2024

# Agri Aware

EDUCATE • ADVOCATE • ENGAGE



# Environmental Innovators Teacher Guidebook



Welcome to **Environmental Innovators**, a transition year programme brought to you by Agri Aware and supported by BiOrbic Bioeconomy Research Centre at University College Dublin.

We have put together this **teacher guidebook** to better explain the role of the student and teacher over the duration of the programme. The PDF will be available to download from our website from **September 11th**. It is important to note here that **no prior knowledge of the subject** is required before introducing this programme to the classroom.

The objectives of the programme include:

- ① increase understanding of the challenges and solutions within the global and local food system,
- ② encourage solution orientated and critical thinking,
- ③ offer supportive material to TYs in their journey towards Leaving Certificate and beyond.

The programme provides foundational knowledge for the leaving certificate cycle within **Biology, Chemistry, Geography, Agricultural Science** and the newly announced **Climate Action and Sustainable Development** subject. This interdisciplinary approach to a subject reflects real-world application of school-taught subjects in a flexible and interesting format.

In addition, the programme covers the transferable skills of **group work, public speaking, debate and research**. The inclusion of food systems education should encourage students to think towards their leaving certificate education and beyond.

There are **four chapters** in the programme. Each chapter should take no more than 3 hours to complete. All teachers and students will officially have 12 weeks (11th Sept – 8th Dec 2023) to cover as many topics as you like. There will be an **additional two weeks** given to complete the final project. The closing date for projects is the **22nd of December 2023**.

Download the  
e-book here



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## The Teacher's Role

The PDF has been structured to include a **comprehensive overview** of problems and solutions associated with the food system. The programme begins with an introduction to the food system and works through the chapters of waste, climate, biodiversity and land use.

You may **guide the students** through the material in the classroom **OR** allow this to be a **more independent** self-directed programme.

We would recommend using the PDF on a **projector** in front of the whole class and working through the material and tasks **together or in groups**. You may cover as much or as little material as you like. The programme may also be printed, with the tasks that require an internet connection completed at another time.

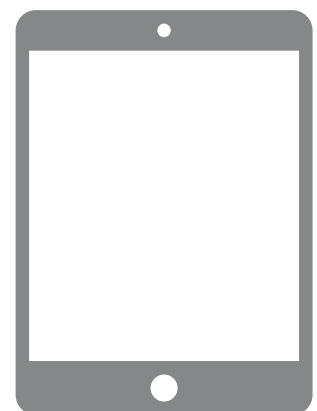
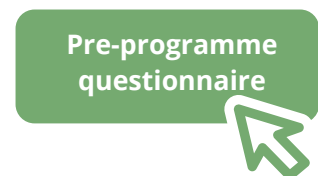
We advise teachers to complete the **pre-programme questionnaire with their students** before beginning Environmental Innovators.

## The Student's Role

The PDF can be **downloaded multiple times** and students will have access to this at home once they have an **internet connection** and a **device** that can connect to the internet (smartphone, tablet, computer or laptop).

We strongly encourage students to begin **working** on their **final project** over the October **midterm** break.

There are a total of **14 tasks** throughout the programme. These tasks will **enhance learning** and assist with **idea formulation** for the final project.



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Each chapter includes some or all of the following interactive components:

## Key Terms:

At the beginning of each chapter there is an optional **'Before You Begin'** activity. This is to ensure that each participating student understands the key terms for the upcoming chapter. The example to the right is for Chapter 4: Land Use

This activity can be done together as a class or as an independent activity once **a hardcopy OR digital copy of a dictionary** is accessible.

## Short (5+ mins) and Long Tasks (20+ mins):

Each chapter contains a number of tasks. Some tasks are contained within the programme, such as the one below.

**Task 7 (15 mins):** Use the map of Europe and the accompanying legend to answer the following questions.

## Live Click Icons:

Other tasks require you to navigate to videos, additional learning material or relevant websites. **Click on the live icons** to the right to test this experience.

Each of these interactive components **require an internet connection** but are entirely optional. The programme PDF itself contains plenty of material. Should you have access to the internet, we would recommend using all interactive components made available to you.

### Before You Begin

The following words are key concepts for the upcoming chapter. Write your understanding of the following words before continuing with the material. Use a dictionary to aid your understanding.

Pasture  
Imports  
Exports  
Acre  
Microbes  
Food banks

Agri Aware



The Agri Aware  
Virtual Farm



Reducing  
Methane



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## Competition

A **student-led project submission** is required upon completion of the programme. Each student that submits (either a solo project or as part of a four-person group) will be in with a chance to present their idea to relevant stakeholders in the environmental innovation space. The National Champions will receive a grand prize of €250 each (up to €1000 per group).

Please note that the **closing date** for submissions is the **22nd December 2023**. If your students have completed the programme before this date, they may submit it earlier. Further instructions on how to submit will be released after the October midterm break.

## The Project Brief

Students should choose a challenge related to the global food system and research it using various sources. A record of this source should be kept.

Students should brainstorm innovative ways to tackle their chosen challenge. The proposed innovation should not negatively affect the environment.

The following submission types will be given full consideration for a position in the final:

1. A video presentation
2. A PDF of a PowerPoint or Canva presentation
3. A group or individual essay

Students should upload their submissions to the submission portal. More details to be released after the October midterm break.

**"Each student or group that submits will be in with a chance to present their idea to a group of stakeholders"**

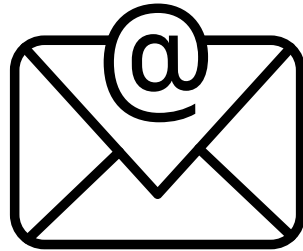
**"The National Champions will receive a grand prize of €250 each"**

**"Can your challenge be tackled with a policy, product, technique or technology?"**

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If you have any further questions, please do not hesitate to get in touch.



Email us at:  
**office@agriaware.ie**

Updates will regularly be given on our social media platforms as well as occasional emails to your sign up email address.



**@AgriAware**



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Thank you again for signing up to **Environmental Innovators** and best of luck with the programme.

Sincerely,

The Agri Aware Team