



## Team Solution Proposal

**M&M's**

**Solution title:** BioTec

**Chosen challenge:**

*(What is the problem? What are the causes and consequences?) Max. : 500 characters or 5-6 lines.*

Our problem lies in the failure to utilize organic waste, which leads us to miss learning opportunities and fail to help the environment. This problem is often caused by a lack of knowledge and recycling habits on the part of the school community and even society, having global impacts. Some of the consequences are the accumulation of organic matter (food waste), which can lead to soil and groundwater contamination and the release of greenhouse gases (rising global temperatures).

**Solution:**

*(Briefly explain what you will create. It must be related to the digital world.) Max: 400 characters or 4-5 lines.*

Our solution involves acquiring a composting tank for the school that includes a tablet where data from each student/class is recorded in order to measure the amount of reuse/composting. This would be achieved through a study using a quiz to determine the school's environmental footprint before and after the project's implementation.

**Target audience:**

*(Who will benefit from your solution?)*

***Max: 100 characters or 2 lines.***

Initially, the target audience would be the school community, but after analysis...

Based on the quiz results, the goal would be to implement the project nationwide.

**Goals:**

What do you hope to achieve with your solution?

1. To raise awareness within the school community about the reuse of organic waste.

2. Reduce the school's environmental footprint.

**Resources:**

*(What materials do you need? Who can help you get them?)*

***Max: 300 characters or 3-4 lines.***

To develop our solution, we need a computer (for the quiz and posters), a composting bin, the researcher Maria José Correia (a researcher in the field of composting), and tablets. To obtain these materials, we need funding from the school or to establish external partnerships.



### Next steps:

*(Divide the solution into small tasks. Describe at least 5 steps to achieve and complete the plan.) maximum 12.)*

1. Conduct a study on the school's environmental footprint through a quiz.
2. Acquire a composting bin for the school.
3. Distribute awareness and informational posters about food waste throughout the school.
4. Invite researcher Maria José Correia to conduct awareness sessions with the school community (students, parents, guardians, and support staff).
5. Start the reuse and production of compost/fertilizer. 6. Place a tablet to collect composting data for each student/class. 7. Measure the amount of composting per class, ranking them and awarding a digital card to the class with the highest composting output per month.
8. Use the fertilizer on the school grounds and distribute the surplus throughout the school community to encourage composting.
9. Award the "Composting Hero Premium Plus" digital card monthly to the class ranked first in the monthly ranking, the "Composting Hero Premium" card to those in second place, and the "Composting Hero" card to those in third place.

How long will it take you to implement your solution?

3 months

6 months

1 year

3 years



## Calendarização

(Idealiza os próximos passos. Quem é que ficaria responsável por cada tarefa e até quando?)

**Dica:** Podes colocar pessoas que não estão na tua equipa, que também podem ajudar a concretizar a tua solução.

Tarefa	Descrição	Responsável (Quem?)	Data de realização
Elaboração e aplicação do quiz	Realização de um quiz digital sobre a pegada ambiental da escola de forma a obter dados sobre a mesma antes e depois da aplicação do projeto.	Equipa M&M's	Setembro de 2026 e junho de 2027
Adquirir o depósito de compostagem e utilizar	Colocar um depósito na escola e iniciar a formação do composto por parte da comunidade escolar.	Obtenção: Escola/Parceiros Compostagem: Comunidade escolar	Obtenção: setembro Compostagem: início em outubro até final do ano letivo
Distribuição de posters	Realização de posters e distribuição pela escola.	Equipa M&M's	Setembro de 2026
Sessão de sensibilização	A investigadora Maria José Correia expõem factos científicos sobre compostagem e biodegradabilidade.	Equipa M&M's e Investigadora articulando com a direção da escola	Setembro de 2026
Utilizar fertilizante	Utilizar o fertilizante obtido para enriquecer os solos dos campos da escola e fornecer o excedente a elementos da comunidade escolar de forma a incentivar a compostagem em casa.	Fertilização: Seria designada uma turma por mês Excedente: atribuído a elementos da mesma turma	Início de novembro de 2026 até junho de 2027
Tablets para recolha de dados	Recolha de dados de compostagem por aluno/turma para que sejam atribuídos prémios	Escola	Início em outubro
Cartões digitais	Atribuídos mensalmente ao top três do ranking	Equipa M&M's	Final de novembro até o final



## Scheduling

(Outline the next steps. Who would be responsible for each task and until when?)

 **Tip:** You can bring in people who aren't on your team, who can help. implement your solution.

Task	Description	Responsible (Who?)	Event dates:
quiz application	Development and implementation of a digital quiz about the school's environmental footprint was analyzed to obtain data about it before and after the project's implementation.	M&M's Team	September 2026 and June of 2027
Acquire the composting tank and use it.	Install a container at the school and initiate the formation of the compost by the school community.	Procurement: School/Partners Composting: School community	Acquisition: September Composting: begining in October until the end of the school year
Distribution of posters	Creating posters and distributing them throughout the school.	M&M's Team	September 2026
Awareness session.	Researcher Maria José Correia present scientific facts about composting and biodegradability.	M&M's Team and Researcher coordinating with the school's administration:	September 2026
Use fertilizer	Use the fertilizer obtained to enrich the soil in the school fields and provide the surplus to members of the school community in order to encourage composting at home.	Fertilization: One class would be assigned per month. Surplus: assigned to members of the same class	Beginning of November 2026 until June 2027
Tablets for data collection	Collection of composting data per student/class for the purpose of awarding prizes.	School	Starting in October
Digital cards	Prizes are awarded monthly to the top three in the ranking.	M&M's Team	End of November until the end from the 1st period, monthly until June 2027



### Difficulties?

*(When we want to do something, we can encounter obstacles along the way. What difficulties do you imagine encountering and how do you plan to solve them?) Max. 400 characters or 4-5 lines.*

In our solution, we identified several obstacles, such as a lack of funding for the various phases of the project and school infrastructure (internet, physical space), devaluation and lack of participation from the school community, and increasing disinterest over time. To overcome these obstacles, we believe it is necessary to find external partnerships and create a reward mechanism to encourage continued participation.

### Originality and Innovation

*What differentiates your solution from the others? How is your solution ready for the... (Digital challenges of the future?) Max. 500 characters or 5-6 lines.*

This solution stands out for combining sustainability and technology, using a competitive system to encourage stakeholder participation. It is prepared for the digital challenges of the future, and it would be possible to integrate artificial intelligence that identifies, for example, the incorrect use of the deposit or creates reports that would allow for the analysis of environmental impact and the proposal of improvements.

### Impact and relevance of the solution

*(What positive impact does it generate in society and the environment?)*

The project addresses future environmental challenges by promoting sustainable habits and reducing waste. Environmentally, it enriches the soil, making it more fertile, allowing for the cultivation of new foods and avoiding the use of chemical fertilizers. These facts demonstrate the project's relevance at both the micro (school) and macro (society) levels, with positive consequences for the environment.

### Describe your idea/solution as if it were a social media post, using a maximum of 280 characters.

Want to be a composting hero at our school? Join us in the fight against Desperdicius and join our composting and organic waste recycling campaign. Contact the M&M's team so you and your class can always be at the top of the rankings. Hurry, Desperdicius is almost winning!