

Green Impact Project Case Study

Pipette Tip Box Changes

Background

Institution: University of Sheffield

Team Name: SITraN

No. of years participating in Green Impact: 7

Highlights

- The main highlight from this particular project is visually seeing the reduction in pipette tip boxes that we are sending for recycling
- Another highlight is the participation and engagement shown by lab users, other than the SITraN Green Impact team members

Description

Historically, at SITraN there has been a tendency to use individually wrapped sterile pipette tip boxes, even though the pipette tip boxes are sent back to the vendor for recycling, the wrapped plastic is not. Changing from this format to a process whereby we keep the pipette tip boxes ourselves and instead just buy the pipette tips and inserts, we only need to put the tips in the appropriate box and sterilise by autoclave (this would only happen when there were sufficient items to sterilise). The cardboard used is much less than that of the previous process, thus reducing the amount of plastic created and the amount of cardboard used.

Members of the team had roles in this to look at financial viability, finding the appropriate tip box and reboxing the tips, recycling our current tip boxes, autoclaving and adding the new and improved pipette tip boxes to the storeroom for users.

The team thought that this would be challenging, as people would be put off by the changes and worried that they would not be properly sterilised for their work, we have found no issues from end users and people have been on board with the change, which was pleasing to see.

I envisage that this change would be easily implemented into any department in the University to reduce plastic and cardboard.

Photographs





Self Assessment

Team engagement

The technical team, which all members are part of the Green Impact team, have a rolling agenda item regarding Green Impact on the monthly team meeting. All team members have contributed to the cause of this project, be it, thinking of the idea, getting quotes for pipette tips or taking photos. We do have excellent engagement within the department, with a large team size, it is difficult for all members to have a huge significance in every aspect but all opinions are considered and it is not difficult to get team members to participate. We also have our administration team on board, being the team leader I am the contact for both staffing groups. **(5 points)**

Reach

Each year we have a new Sheffield Hallam University student with us for a placement year, this individual is always in the Green Impact team and I ensure that the student has a task to do, hoping that this 'green thinking' can be instilled each year with each student.

We have all lab users in the department engaged in this project, from MSc students to professors, their feedback is key to the success of the project. We are able to reach out to individuals in other departments to see what they do with regards to pipette tip purchasing, which could improve their provision and in turn give us help to improve. **(6 points)**

Creativity

Although this was not a creative idea, it was a new idea to the department and quite a change here, for so long sterile pipette tips were purchased without much thought given to the plastic and cardboard used in their production, packaging and shipping. **(3 points)**

Impact & measurability

Our sustainability has certainly improved, this can be seen in the photographs above, we can see the reduction in plastic and the impact we are having as a department, we do not have a measurable target, but we hope that in the future we can decrease the plastic more and more over time and also concentrate our efforts on other lab consumables. **(6 points)**

Proportionality

It was a change that was implemented and we will continue with it, we have so far got ongoing engagement in this project, I can only see the engagement increasing over time. This change will have benefits over time, with success that the team deserve, our administrative team did not participate as they are not lab-based. **(5 points)**

Replication

As mentioned above this project can easily be replicated by others, we want to try something similar with a plastic-reducing initiative on other plastic consumables. **(5 points)**

Legacy

The project will continue to happen now that it is implemented. The technical team are responsible for ordering consumables and so that work will keep happening even if staff were to leave the department. **(5 points)**

Outcome

We didn't expect this project to be as successful as it was, it has exceeded our expectations in the participation by those working in the laboratories. **(5 points)**