# UAM Recycle Challenge:

# The Idea

## Purpose:

An activity that teachers can carry out independently in their class/club, providing flexibility on when they do it and how much time they dedicate to this. Project timescale and depth can be decided on by the teacher (can be a 1h activity, a month-long project, or even a competition).

Shared designs can later be showcased on Flight Crowd's website.

## Activity Aim:

Introduce school students to Urban Air Mobility (UAM) in an interactive way, encouraging creativity & innovation in design. Students are tasked with designing and building a UAM vehicle and vertiport that successfully work together. These are to be built from recyclable materials that can be found at home to highlight the importance of sustainability in UAM.

Skills developed:

- Teamworking
- Communication within & between teams
- Creativity
- Problem solving
- Interpersonal skills

Links to the UK National School Curriculum:

- Design & Technology - iterative process of designing and making, investigating new and emerging technologies, performance of materials and structural elements.
- Physics - motion & forces between and within the vehicle & vertiport structures.
- Mathematics - numerical operations and geometry to calculate dimensions.
- Art - develop creativity and ideas using various media, architecture.
- Biology - considering how organisms are affected by their environment.

A detailed description of the activity can be found in the 'Activity Brief' document. Team sizes can be decided by the teacher based on class size. We suggest 4 students in each team.

## Pre-Activity Support from Flight Crowd:

We will create an activity brief for the teachers & students, an accompanying short introduction video, as well as a list of further resources. If you would like further support from our team or for us to provide feedback to the designs, contact us!

For any questions please email outreach@flight-crowd.com