

Climate Heroes Project

Our proposal is to create a Climate Heroes Project centred on community action against climate change, by providing learning spaces and opportunities to protect the environment. Our application is based on dialogues between the parents, teachers, and pupils of St Fergus primary School in Ardler, Dundee. Ardler is part of the Strathmartine ward which has high levels of child poverty according to local SIMD data available. Whilst the main thrust of our application aims to address climate change it also seeks to advance early years and child learning/ development. Our proposal therefore connects well with other local community learning initiatives aimed at saving energy and costs amidst a cost-of-living crisis.

The key themes that our Climate Heroes project will focus on are:

- Energy by promoting energy efficiency and use of renewables.
- Resilience by improving greenspaces, biodiversity and local food growing.
- Waste by recycling, reducing waste and reusing resources.
- Building capacity by increasing awareness and engaging communities and young people in climate change.

The funding will be used for the development of a School Allotment and Eco Classroom with weather station, and rewilding the playground.

Our project will connect with and involve the Development worker of Ardler Village Trust as a link to other local environmental initiatives and projects. This will include growing fruit and vegetables for the Early Evening Café at the Ardler Complex and Community fridge so that no food goes to waste. The development worker (AVT) has agreed to work with our project to ensure there is volunteer capacity to sustain the allotments and garden during school holidays.

The proposal for an Eco classroom, comprising of a 12" x 12" wooden outbuilding situated in the grounds of the primary school. Supplied and constructed from local suppliers using sustainably resourced wood materials.

It will accommodate approximately twenty children plus teaching staff, with picnic style benches for seating. Having an outdoor practical space for learning can help make subjects more vivid and interesting for children to enhance their understanding and aid creativity.

We envisage the Eco classroom to have the appearance of a wooden house with large windows to let in natural light. One side will have large doors that can fully open and be secured. This will create an immersive outdoor experience for learning and promote wellbeing. The Eco classroom would be used year-round therefore having the opportunity to close the doors to provide shelter from the elements, but still feel engaged with the environment. It will also provide a lock to secure after use.

As part of our Eco Classroom, we will house educational and sustainable environment equipment and supplies. We intend to reuse our natural resources by installing guttering on the roof to harvest rainwater and have solar lighting fitted in the form of string lights. This will promote energy efficiency by using a renewable energy source.

We intend to have a Mini Weather Station as part of our educational equipment. By encouraging the school children to use it, we can create an engaging, hands-on approach to learning about our climate and how it changes. They can record volumes of rainfall, wind direction and temperature. These values can be used to create a visual resource that can monitor the seasons and changes in our weather over time.

The second aspect of our Climate Heroes Project will be to create a school allotment within the outdoor quad area in the middle of the school. This area is fully enclosed and can only be accessed from inside the school therefore an ideal secure location to grow fruit and vegetables.

This will provide health and wellbeing benefits as well as educational benefits to the children about sustainability, caring for crops and producing our own food. Learning where our food comes from and how to reduce waste. The school kitchen can make use of the fruit and vegetables and the community café situated in the Ardler Complex. By having a link with the Development worker of Ardler Village Trust and access to other environmental projects within the community we can share skills and experience from community volunteers will help get our allotment up and running.

We also propose rewilding areas in the playground. We aim to plant native species in the area, and by not cutting the grass in the long sections at the edge of the playground, nature can regenerate and grow into a wildflower meadow which will support dwindling populations of native pollinators including bees and butterflies, helping to sustain insects that pollinate our food crops. We intend to plant wildflowers within the wooded area towards the back of the playground, creating more green space and boosting the presence of insects and small wildlife. Children can spot butterfly species and take part in UK wide surveys such as Big Butterfly Count.

Furthermore, we propose to enhance the biodiversity of the area by creating bird houses in the trees and a minibeast hotel. Children can be involved by decorating wooden bird boxes to hang on the trees and by looking after and maintaining the minibeast hotel provides opportunities to learn about how we care for other creatures, as well as plenty of counting and sequencing opportunities. By encouraging the school children within the community to be aware and take care of nature and wildlife on our doorstep we can promote the importance of looking after our environment.

These increased green spaces will not only benefit the environment but also indirectly benefit our health by improving the air quality, connection to nature and mindfulness. They will also function as a sustainable urban drainage system within the area, which in turn will prove to be beneficial with the current climate change challenges.

We believe there is a need for community action against climate change now, more than ever. We need to educate people today, for a better planet tomorrow. The aim of the Climate Heroes project is to help achieve this.

Costing

Eco Classroom

Building: 12" x 12" Rannoch building, constructed in 19mm thick tongue and groove Redwood Scandinavian Pine weatherboard, 70mm x 40mm clean dressed framing, 19mm thick tongue and groove Redwood flooring, 75mm x 45mm pressure treated floor joists, 16mm tongue and groove redwood Sarkin, Steel Box Profile Roofing.

Construction, Delivery, and Installation: constructed on company premises in Errol then delivered and installed on site. Approx 5 hours. Order time approx. 6 months.

Guttering for rainwater collection: Guttering, downpipe and shoe included with Rannoch Building

Decorating (External) – Painting and weather proofing treatment supplied first coat but must be retreated within 3 weeks of assembly (paint supplied)

£7,106.00 Inc. Vat

Quotes were received from three different suppliers, Wood N Garden in Glencarse, Balmuir Sheds in Dundee and Forest Craft in Fife. Gillies and MacKay provided the best quality materials and longevity reassurance. They have also included extras in the cost, by providing the guttering and paint treatment.

Landscaping: Ground preparation for Rannoch building. Using sustainable and natural materials where possible, delivery, and labour provided by Homescape Professional Garden Services.

£4,909.80 Inc. Vat

Interior: To get the school children involved with the eco classroom and to promote reusing resources, we propose handmade decorations made from recycled materials, plastics, bottle caps etc made by the pupils to hang up inside the classroom.

- Large magnetic white board for learning / presenting and display purposes. 1.2m x 1.2m £76.92 Incl VAT (sourced from www.teacherboards.co.uk)
- Educational posters about climate change and recycling £17.94 Incl VAT (resources from hope-education.co.uk)
- Solar lighting powered by rooftop solar panel. Bright white solar powered outdoor LED string lights. Length 2m £13.99 B&Q
- Seating: 3 x Round compact picnic tables, seats up to 8 people. Pressure treated, no protruding bolts, made from sustainable wood. Diameter 119cm £624.00 (sourced from www.playgroundimagineering.co.uk)

£732.85 Inc. Vat

Outdoor Weather Station: Forex structure, suitable for outdoor usage to measure and chart data behind changes in our weather. (Resourced from www.hope-education.co.uk) £479.94

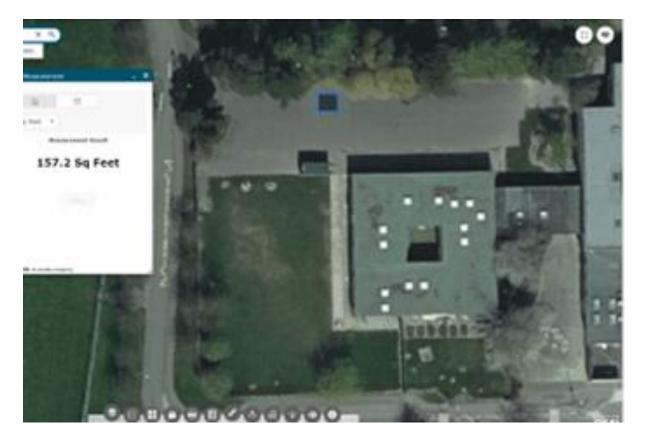
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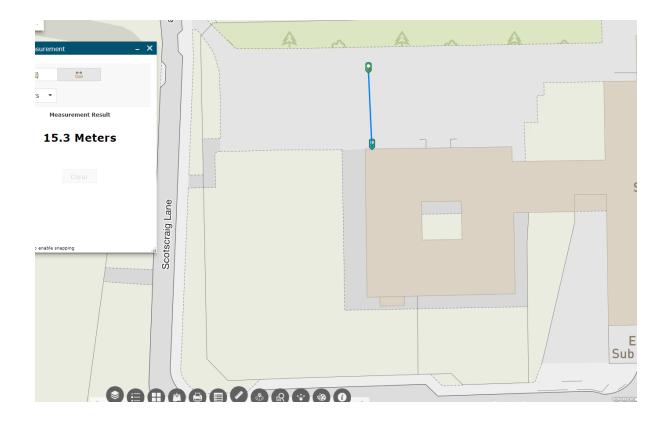
- Rain gauge
- Max/min thermometer
- Barometer
- Hygrometer
- Wind's direction indicator with wind rose
- Dimensions: 330 x 480 x 580mm

£479.94 Inc. Vat

Maintenance and Care: will be provided by members of the parent council, volunteers from school staff, Ardler Village Trust, and the community. Damages to the building will be covered by the school insurance.

Location Plan: Approval in principle has been given from planning and property officers. The structure will be approximately 13m away from the main school building and comply with all health and safety requirements.





School Allotment & Rewilding

Planters: Green fingers Package - 3 fully moveable, 8 box planters. 24 individual planters in total, a bird feeding station, trellis, custom engraved sign, custom engraved bench, and a dolly trolly for moving the individual plastic containers around. £2,253 Incl. VAT plus delivery. (Sourced from www.ypo.co.uk)

Soil: supplied by Discovery Compost. Produced locally by the Council from the garden waste you put into your brown wheeled bin plus green waste produced from local parks and commercial landscapers. Garden waste is a valuable resource and by diverting it from our Energy from Waste facility, we are helping to reduce our carbon footprint as well as making a useful product. Discovery Compost is certified to Publicly Available Specification 100 (PAS 100) standard which guarantees it is of a consistently high quality and is fit for purpose. Compost is available in 20mm grade from Riverside at the following VAT inclusive rates:

- Fill a bag for £1.00
- Up to 100 tonnes £9.60 per tonne

£2,262.60 Inc. Vat

Maintenance and care: to create and maintain our school allotment, we need to invest in garden supplies. We plan to store these supplies in a small garden shed within the allotment area. These can be purchased at many local stores. We propose £250 to be spent on equipment.

- Small garden shed (Keter Store It Out £125, B&Q)
- Trowels
- Forks
- Bamboo poles
- Netting
- Gardeners' gloves
- Watering cans

Fruit and Veg: The produce we plan to grow will be seasonal and easy to care for in the Scottish climate. We plan to make use of plant / seed donations from the public and other community gardens, for example the Ardler Garden at Ardler Complex and St Marys Community Church Garden.

- Onions (plant in March April and again in October)
- Courgettes (plant in May-June)
- Potatoes (year-round)
- Carrots (plant in March July)
- Parsnips (April May)
- Runner beans and broad beans (May July)
- Strawberries (June- August)
- Raspberries (June August)
- Blueberries (June August)
- Rhubarb (March May)

£250 Inc. Vat

Wildflower Meadow: Preparing the area for the wildflower meadow will include letting long sections of grass grow and scattering seeds within the grass and tree area at the back of the playground. Seeds can be purchased at many local stores approx. £1

Minibeast hotel: Bug and Insect House – Woody £399.99 (sourced from www.wildlifeandbirdcare.co.uk)

£399.99 Inc. Vat

Total project cost £16,141.18

Example of Mini Weather Station:



Example of Green Fingers package:



Example of Educational posters:



example of benches:



Example of Minibeast Hotel:



Wildlife and Birdcare Woodland & Park Bug and Insect House - Woody

£399.99

by <u>wildlifeandbirdcare</u> Type: <u>Insect and Bug Hotels</u>



Wildlife and Birdcare Woodland & Park Bug and Insect House – Woody. Built for our Woodland and Park customers, but nothing stopping anyone putting one of our GIANT sized bug and insect houses in their garden. Why don't you help protect insect species, inspire children & give nature a voice. When you add a bug hotel to your garden, woodland or park you can learn and teach more about "The Bugs' that visit and live in your garden, woodland or park. Zoos, nature reserves, trusts, woodlands, parks and local authorises are buying our giant bug and insect hotels. We are designing and building these bug and insect houses to our customers specifications.

Bug hotels benefit lots of different types of minibeast and insects such as ladybirds, bees, spiders and woodlice. Minibeasts can then use your bug hotel as a safe space to shelter, lay their eggs, raise their young, and seek refuge from predators. Woody is 1800mm tall

With Our Unique Insect Hotels are made by our skilled joiners and people with Learning Disabilities. These are all designed and made by us in our joinery workshop in Staffordshire. Century giant Bug and insect Hotel is filled with natural foraged twigs, logs and pine cones collected from our local forest floors. Our placement students with special needs go out every Monday and collect when we need to make our bug hotels for you. We add Stoke-on-Trent fired clay bricks as an attractive addition.

Everything is collected from the forest floors apart from our addition,





