

Q1: What and where is your organisation and community?

We want to know who you are and where your work is happening. How are the people in your community in the lead?

The Findhorn Ecovillage Community is in northern Scotland, about 35 miles east of Inverness on the Moray Firth, and has existed and grown since 1962. We comprise a population of some 200 residents and 350 local members, and about 40 associated businesses and charities including the Findhorn Bay Caravan Park, our original home that we purchased in 1983. As an Ecovillage we aspire to live our lives and manage our affairs sustainably and in harmony with nature. The Findhorn Ecovillage Collaboration Circle includes representatives from 15 key organisations working with and representing 450 local ecovillage residents and friends. The joint vision for Findhorn Ecovillage is achieving Carbon Neutrality by 2030.

Key organisations within the community Collaboration Circle include:

Park Ecovillage Trust (PET) was created to advance the social and environmental sustainability of the community (www.parkecovillagetrust.co.uk). Founded in 2009, PET is a community benefit charity with a hundred plus members. It has conducted community carbon footprint assessments since 2015, and has recently built 10 affordable eco homes within the community. A further 8 are planned for construction next year. PET is the primary applicant for this grant.

Findhorn Foundation (FF) is an educational trust founded in 1972 that hosts about 4,000 residential guests and 10,000 visitors a year within the community. The variety of courses offered focus strongly on sustainable living and personal connection with the natural and subtle worlds. To continue and improve its work, it currently plans to provide state of the art eco-accommodation and related facilities that will require minimal heating and actually draw down carbon emissions.

FF has a trading subsidiary, New Findhorn Directions Ltd (NFD) which, among other activities, runs the Findhorn Bay Caravan Park. NFD is replacing three of the original style caravans during the winter of 2019/20 with eco-pods in an experiment to see what reductions can be made to CO2 emissions and align the accommodation of the Holiday Park with the rest of the eco-village. Further investment in new eco-pods will be made during the winter of 2020/21 if the experiment provides positive results.

In addition, with grant assistance from the Rural Housing Fund, NFD is currently constructing 8 social housing/affordable accommodations on land leased to it by FF. These eco-friendly homes will be available to rent from April 2021.

PET and FF collaborate on a scheme called 'Planet Care Commitments'. This includes reducing their respective organisational footprints and collaborating with the Scottish Network in pursuit of the UN's Sustainable Development goals, focused on 12 distinct domains: Food – Water – Forestry - Carbon offsetting - Eco-literacy – Biodiversity -

Renewable energy and efficiency - Value and supply chain sustainability - Circular economy - Reducing plastic pollution - Creating a sharing economy - Subtle activism. During the past year they have jointly established a carbon offset service targeted at both residents and guests who visit the community to attend FF programs.

We now wish to extend the Planet Care Commitments in collaboration with the rest of our ecovillage community to become carbon neutral by 2030. Carbon neutrality is a process achieved over time. That means we need to develop emissions goals for the coming years. An important aspect will be to create a commitment to that goal among community members and ensuring that all departments and businesses participate in developing plans for reducing the use of fossil fuel energy. In order to manage and lead the work a task force will be assigned. The team will lead the internal processes and also manage the contacts with suppliers. It will also research good examples, relevant standards and certifications needed to ensure low carbon purchases and investments, to create the necessary knowledge base.

The Findhorn Community has long been a centre of inspiration, demonstrating environmentally advanced solar and wind technologies, green buildings, biological waste water treatment, permaculture, and local food production. We want to continue to be a centre of inspiration and will now align ourselves with the climate goals required to respond to the 'climate emergency' declared by both the UK and Scottish governments.

Q2: What does your partnership look like?

What organisations, sectors, groups and people have you been working with and speaking with about this fund? Have you worked together previously?

FINDHORN ECOVILLAGE STAKEHOLDERS

PET is part of a community wide 'Collaboration Circle' whose membership includes a variety of organisations involved in the work of climate change mitigation and adaptation, including Findhorn Foundation, Findhorn College, Moray Car Share, the Hinterland Trust, Findhorn Wind Park, Bio-Matrix Water, AES Solar, all of whom have been engaged in advancing the sustainability of the community.

BROADER COMMUNITY STAKEHOLDERS

PET has a partnership with Ecometrica in Edinburgh, a consulting company whose carbon calculation tool has more than 30,000 scientifically and internationally accepted emission factors embedded in their calculation software. We have another collaboration with Carbon Footprint Ltd. for use of their carbon offsetting software. We are licensed to use a portfolio of offsetting projects in developing countries, both projects that draw down carbon from the atmosphere and projects that replace fossil fuels.

Findhorn College has recently endorsed FF's Planet Care Commitments and reorganised its curriculum accordingly, in tandem with the Findhorn Innovation Research and Education (FIRE) CIC that the College created this year to accept research grants. It has also been working for several years with Herriot Watt and Strathclyde Universities on a variety of

renewable energy related projects, most recently in India. They are also in touch with the Caledonian and Albion Housing Associations for whom they have designed district heating schemes in line with those currently either already in operation or in prospect here in our community.

We have spoken to Moray Council who have recently declared their own 'climate emergency' in Moray, with the engagement and encouragement of community related groups. Interestingly, Moray Council, like PET, has recently set a goal of achieving carbon neutrality by 2030. The intention is to collaborate with the council on projects of mutual interest and benefit. Moray Council have also indicated some council owned land could be repurposed for growing food.

We have spoken to the Royal engineers in nearby Kinloss. They have indicated interest in collaborating with us on an integrated carbon neutral energy system for their Army base, and possibly food production &/or tree planting on their currently underused lands.

Finally, we have a long-standing collaboration with our immediate post code neighbours the Global Ecovillage Network (GEN) that comprises more than 10,000 communities around the world and seeks to promote the benefits of ecovillage living on a global scale as a healthy antidote to a climate changed world. GEN is currently funded by a LEADER grant to share and learn from local villages in Moray on climate change concerns and solutions using their process expertise. The outcome of this will be 3 community lead climate change resilience pilot projects that could be replicable and/or inspire similar community lead initiatives in other Moray communities in the longer term and as part of our project. (We are aware that our collaborators GEN are also putting in an LOI for this call and we are in early discussions on joint activities particularly on spearheading a multi levelled stakeholder networking towards zero carbon Moray 2030.)

Q3: What have you been doing, to date, to take action on climate change?

Describe the work you have done so far, and the impact it has had. Describe your vision for climate change action in your community (now or in the future). What are you aiming to achieve? Do you have any results that you could share?

The vision that PET is pursuing within the community is that of Carbon Neutrality by 2030.

With this vision we align ourselves with the Paris Climate agreement to keep the global temperature increase to no more than 1.5C. It also aligns us with the most bold and ambitious carbon reduction plans for nations, cities and corporations, and with our own Moray Council.

The community's vision for effective climate change action has been heavily influenced by the author Paul Hawken and particularly his widely acclaimed recent book *DRAWDOWN*.

Of the 100 global initiatives that Hawken describes in this book, about 22 of them are already in evidence here in our Findhorn Ecovillage Community, albeit often in 'incipient' forms. In descending order of 'bang for the carbon buck', they include: 1. Onshore Wind (Findhorn Wind Park). 2. Plant Rich Diet (Findhorn Foundation). 3. Educating Girls & Family Planning (Ecologia). 4. Rooftop Solar Photo Electric (AES Solar, Findhorn Wind Park, local residents and businesses). 5. Regenerative Agriculture (Findhorn Gardens, Cullerne gardens, Newbold gardens, Permaculture plots, etc). 6. Afforestation (Trees For Life). 7. Geothermal (Moray Arts Centre heating system). 8. Electric Vehicles (Moray Car Share). 9. District Heating (FF & Soillse Co-Housing's Biomass Boilers & PET's air source heat pumps in 'West Wings', our affordable housing development). 10. Insulation (all new buildings and several older FF bungalows). 11. LED Lighting (lots). 12. Solar Water (AES Solar installations on multiple buildings). 13. Heat Pumps (East and West Whins developments). 14. Airplanes (PET & FF's CO2 offsetting). 15. Household Recycling (Moray Council). 16. Smart Thermostats (new builds in East & West Whins developments). 17. Bike Infrastructure (pervasive on site and cycle path to nearby Forres already in place). 18. Composting (all gardens and most individuals). 19. Electric Bikes (MCS & several individuals). 20. Green Roofs (FF & several individuals). 21. Energy Storage (Findhorn College, FWP & recent Hive energy system). 22. Microgrids (FWP & New Findhorn Directions). 23. Retrofitting (FF housing).

Now the intention is to take all these actions further in a systematic and strategic way to make the whole community carbon neutral.

Q4: Describe your collective goal or vision for taking action on climate change? Describe your vision for your climate change action. What are you aiming to achieve and what does/will it look like in practice? How and why did you decide on this goal?

As indicated in our reply to the previous question, the community has long been aware of the climate challenge and taken actions to address it. PET & GEN were both present as NGOs at the UN COP20 when the Paris Agreement was achieved and brought its aspirations home. FF convened one of its largest international conferences in April 2019 called "Climate Change and Consciousness". In this context, and in light of the climate challenges since identified by Greta Thunberg and millions of youth worldwide, PET has made its goal to achieve Carbon Neutrality by 2030 for the community and to advance both our mitigation and our adaptation processes in concert with the community, its partners and its Collaboration Council.

Findhorn Ecovillage aspires to be a demonstration centre on Climate Change Mitigation offering Climate Change Education programmes and replicable community led demonstration Climate Change initiatives. It will kick off a Moray CC stakeholder network with a mission to not only garner support for Findhorn Ecovillage Carbon Neutral 2030 but also inspire and learn from local climate change community led initiatives in Moray.

The outcome in this planning / pilot phase will be a concrete plan for Findhorn Ecovillage Carbon Neutral 2030 and many other Moray community actions towards carbon neutrality.

Our proposal is for development funding to further partnerships, initiate stakeholder networks, map CC concerns and opportunities, create replicable community led pilots and develop clear back-casting plan towards Findhorn Ecovillage Carbon Neutral 2030 in alignment with local Moray community actions towards Moray Carbon Neutral 2030.

Specifically, the 18 month pilot and planning stage will include the following actions:

1. Community Mapping of Park / Peninsula / Moray on food resilience - what locally grown / sourced food is there, what opportunities for locally grown / sourced food are there, how can this happen? What land is available for growing food (particularly repurposed land)?
2. Develop capacity within the community to create a host of activities related to climate change adaptation e.g. food preservation (skills and facilities) to work in tandem with our food production system.
3. Community Led Replicable Pilot Community Resilience projects
 - Zero waste Findhorn Ecovillage
 - Composting Project
 - Regenerative Agriculture Pilots in Findhorn Ecovillage & repurposed land in vicinity¹
4. Create multi-level stakeholder Moray climate change concerns network, including Moray Council, Kinloss Base, Voluntary organisations, GEN, local Councils, schools, business networks, Extinction Rebellion etc.
5. Form an educational collaboration with GEN, FF, Findhorn College, Transition Town Forres and Moray Council to engage communities in Moray and spread the skills and knowledge necessary for climate change resilience and well-being as far as possible amongst local people. Pilot Climate Change Resilience training and extension in local communities
6. Social Media Campaign for climate change concerns & solutions
7. Stakeholder Recommendations to local governance on Climate Change mitigation adaptation plans
8. Consultations with communities on current concerns & potential solutions in Moray on climate change (possibly in partnership with GEN Leader project)
9. Clear back-casting plan to carbon neutral Findhorn Ecovillage by 2030 that will also include local Moray community actions inspired through consultations and stakeholder networking e.g.

¹ Locally grown Organic food production is crucial to tackling climate change as it sequesters large amounts of carbon in the soil while improving nutrient content of the food being produced. Establishing local food supply networks is crucial to reducing food miles - the distance that food travels between its place of production and the eventual consumer.

- Community led replicable projects in Findhorn Ecovillage & Moray villages
- Climate Change Education & Resilience Programmes & extension (by local communities for local communities)
- Form consortium of stakeholders and raise the money to repurpose, buy or rent nearby land for more food growing – intended to increase the distribution of local & organic food.
- Design and build additional demonstration – state of the art – net zero carbon - district heating and energy systems using a broad range of renewable energy sources with the intention to create a Whole Park ecovillage energy strategy plan in collaboration with researchers at Strathclyde University.
- more district heating schemes, here and with partnering housing associations
- more sustainable energy projects with our university partners,
- more sustainable transport, i.e. bio-diesel in the short term and electric cars and buses in the longer term (FF, Moray Council & MCS),

It is anticipated these would be joint ventures with Findhorn Ecovillage & broader stakeholders.

Q5: Who do you feel is doing the best climate change action work?

Tell us about what you've seen elsewhere and who you're learning from.

The Transition Towns Network was among the first national groups to generate initiatives from the grass roots up. As has the Centre for Alternative Technology (CAT) in Wales who have long inspired many of our own initiatives. CAT's current collaboration with district councils across the country to implement their respective climate emergencies provides a ready reference for our own actions.

Q6: How are you engaging with other communities?

Have you or others in your partnership worked with other communities and different places to take action on climate change?

The Global Ecovillage Network (GEN) International, one of our partners, is in close and constant touch with ecovillages worldwide and has compiled a compendium of initiatives taken to date. We would share the fruits of our project here with GEN for distribution both to its network of Moray villages and to its global network.

Findhorn College, another of our partners, has collaborated with Herriot Watt and Strathclyde Universities in a consortium that has resulted in an EU grant to do smart control of energy systems with a large proportion of renewables from 2011-13. The same consortium got a

DFID grant in 2017 to develop a smart irrigation system in India and the success of that resulted in a spin off Scottish company called Farm Hand Ltd. It's also developing smart controls of air conditioning and street lighting systems. It is currently field trialling a flow cell battery owned by Strathclyde and installed at Findhorn. Findhorn College worked closely with Strathclyde on a low carbon sustainable heating system here in 2017—18. The consortium also collaborated on the development of district heating systems elsewhere in the Highlands with the Caledonian and Albion Housing Associations.

We seek to apply these initiatives on a community scale within The Park ecovillage settlement with a view to making our learning available to other communities in Moray in collaboration with Findhorn Foundation, Findhorn College, GEN, Transition Town Forres, and Moray Council. We would also share our initiatives with our many guests from around the world, and encourage them to take comparable actions.