

BODHI-SCI ECOVILLAGE BUSINESS PLAN

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BODHI-SCI ECOVILLAGE BUSINESS PLAN

DESIGN SUMMARY SHEET

Brief: Design a business plan for the Widows' Land Ecovillage Proposal

Strengths of Design:

- ✧ This is a complicated design which is difficult to put together, but I have managed to summarise and collate information from 5 years' work simply.
- ✧ It's a real world design!
- ✧ Plenty of work with numbers, including costings, graphs, projections etc.
- ✧ Dissemination – it's all about education on a big scale

Design framework: SADIMET

Principles Used in Design:

1. Observe and interact
2. Catch and store energy
3. Obtain a Yield
4. Apply Self regulation and Accept Feedback
5. Use and Value Renewable Resources and services
6. Produce no Waste
7. Integrate rather than Segregate
8. Use Small and Slow Solutions
9. Use and Value Diversity
10. Use edge and Value the marginal
11. Creatively Use and Respond to Change
12. A single element carries out many functions
13. A single function is served by many elements

Ethics in Design: Earth care, People Care, Fair share

Initial design completed: July 2010

Implemented?: No

What I would do differently?

- ❖ Be clearer from the outset about using the SADI model, this would have helped to reduce the jumping around in terms of when we were doing observation, analysis or design work, and helped to make sure we had all sides covered.
- ❖ I still think us doing the observation, as much of the analysis work as possible, and summarising it clearly into the business plan design (as here) is very useful to have done before handing the figure crunching and writing over to a professional.
- ❖ Think clearly about what my level of skills are and try to say 'no' more often!

Acknowledgements

This design has been put together through many years of work by many different people. In particular I would like to thank: Larry Butler, Ratnadevi for their inception and determination to succeed of Bodhi Eco Project; Paula Cowie for all her work developing the ecovillage vision within SCI; developing the partnership with Bodhi, and all the hard work she has put in over the years (including some of the work in this document); the core residents and Bodhi Directors past and present who include: Judy Russell, Mark O'Reilly, Tom Wallace, Rosie, Geetam, Justin Kenrick, Andrew Marnie, Hamid, Leilani, and Luci Ransome. Not to mention the legal structure working group who include Steve James and Claire Martin, without whom we couldn't have got this far. And of course, the loving support of my family: Danny, Robin and Luis Alderslowe.

Picture 1 – camping at the Widows' Land: Luis Alderslowe, Judy Russell, Larry Butler, Danny Alderslowe, Robin Alderslowe (starting at top right)

authorities, and selecting Fife as one of the most green and forward-thinking; researching eight possible legal structures and narrowing it down to two options; not to mention all the sites visited (see appendix 1), and site criteria formed with one selected; let alone all those core residents' meetings!!!

Although I started working with Bodhi at the same time as I was completing my permaculture design course in 2005, I only started to deliberately use the permaculture designing tools when designing the business plan which I started in January 2010.

In permaculture language, this followed SADIMET. Below I show how this cycle has been approached in this design, with the different themes, for example site work, highlighted in a particular colour, so you can see where it falls in each section. It wasn't always done in the obvious chronological order which simpler designs follow, largely because it's so complex!

1. Surveying / Observation

1. Site observation
2. Why make a business plan?
3. What's in a business plan?
4. Researching other businesses (inc. finances)
5. PASTE, core residents' vision.
6. Surveying prospective customers
7. Local Residents and Business People
8. Researching Legal Structures

2. Analysis

1. Site analysis
2. SWOT analysis of businesses
3. Analysing the survey results of customers
4. Analysing Legal Structures
5. How will we build the ecovillage?

3. Design

1. Site overview design
2. Mission statement, aims and objectives
3. Select businesses
4. Financial projections and marketing strategy
5. How many jobs will be created by the ecovillage?
6. Choose a legal structure
7. Design statement
8. Design business plan

4. Implement

1. How to get a legal structure
2. How to write the business plan

1. OBSERVATION

1.1 Site observation: The Widows' Land

The land identified as most appropriate of all those researched is called the Widows' Land on the outskirts of Burntisland, 10 minutes walk NE of the train station. See map in diagram 2.

Diagram 2 – Ordnance Survey map augmented with a dark line to show the borders of the Widows' Land

As you can see, the Widows' Land is sloping quite steeply to the South, and South-South-East, it is close to the North coast of the Firth of Forth. The lower boundary is fenced before a row of houses. The lower slopes are the least steep and are currently used as rough grazing. There are great views across the Firth to Edinburgh, and there's a beach nearby, see picture 2 below.

Above the land is The Binn, a hill of 191m with a radio mast on top. Binnend is a ruined mining village; the only thing remaining is the ruined school house (see picture 3). Next to it is Alcan Land where they have a large hole in the ground just in case they need to use it to cleanse more of the Aluminium mud which has been dumped around the country.

Picture 2 - view from just above Widows' Land across the Firth of Forth to Edinburgh

The story goes that what is now called the Widows' Land was once owned by a wealthy man who was friendly with certain widows in the town. When he died he left the land in Trust to those Widows with particular surnames. These widows rented out the land to others who grew barley/oats or used it for grazing, giving them a modest income, hence the unusual name. Once there were no more appropriate widows living in Burntisland, the land was transferred, by default, to the local (Fife) council.

Picture 3 – the ruined schoolhouse at Binnend, above the Widows' Land

1.2 Why make a business plan?

My initial reaction to writing a business plan was that we would outsource this work. However, others in the group pointed out that SCI had previously written a business plan and it was not very difficult. I was willing to take up the challenge, but firstly wanted to identify the purpose of the business plan, as shown in Table 1.

Table 1 – Why we need a business plan

Why are you doing a business plan, what is its purpose?

1. We are required to submit a business plan to the planners. The business plan therefore needs to be able to convince the planners that we have decent business ideas which will be viable in the long-term.
2. In order to ascertain the feasibility of the whole site we need a business plan – to ascertain feasibility for ourselves
3. In order to borrow money from banks (e.g. Triodos), and individuals (e.g. loanstock) we will need a sound business plan which adds up. This will need to demonstrate the financial viability of the project (that they will get their money back).
4. In order to receive funding we will require a business plan
5. For ourselves - to know what the plan is and how we will get there, financially too

1.3 What's in a business plan?

I researched various business plans, and guides for writing business plans. I found 10 steps to help you design your business plan. These are:

1. Decide which business best suits you and where it should be.
2. Compile market research data to summarise the competition.
3. Decide how much capital you are able to invest and then set your business objectives.
4. Decide on the legal structure of your business. Identify your target market.
5. Compile your marketing strategy to show how you will sell your product or service.
6. Work out how many employees you will need and what they will cost.
7. List any equipment you need and how much it will cost.
8. Compile your cash flow, profit and loss and balance sheet forecasts.

9. List your assumptions indicating how you arrived at these figures.
10. Write notes about each of the above points.

The next step is to write the business plan, which means condensing all the information into 20 to 40 pages all inclusive.

Things which need to be in a business plan include:

- ⊗ Vision
- ⊗ Summary
- ⊗ Description
- ⊗ Market research report (including competition and customers)
- ⊗ Marketing plan
- ⊗ Product/service
- ⊗ Price
- ⊗ Advertising and promotions
- ⊗ Distribution (place)
- ⊗ Financial plan (inc. capital budget; cash flow; profit and loss)
- ⊗ Action plan
- ⊗ Monitoring

Around this time someone inquired about volunteering with us. She lives near me and has just completed a Masters in Risk Management which included business planning. Together, we composed a workplan which aimed to complete the business plan in July 2010. This assumed that the core residents would make certain decisions which were required, however each time we came back to some of the questions (e.g. name, or legal structure for the land trust), the core residents could not reach consensus.

1.4 Researching other projects/businesses

All members of the core residents have researched ecovillages, co-housing, and sustainable living education projects in different places. In this I focused on researching businesses with which we would compete or cooperate.

The businesses (or income streams) prospectively identified by the core residents group as possibilities for the ecovillage were as follows:

- a) Bunkhouse
- b) Organic café and eco-shop
- c) Community Renewable Energy Generation
- d) Housing Cooperative
- e) Educational programme
- f) Organic veg box delivery scheme

- g) Office space for projects
- h) Land Management - including roads/tracks/forest management
- i) Allotments

I researched other organisations within each business type (apart from the last 2, because of lack of information and time constraints), firstly looking for local organisations, then ones elsewhere in Scotland, if there were not many examples here, I researched ones elsewhere in the UK, and then in the rest of the World. For each business I researched the questions shown in table 3.

Table 3 – Research questions for businesses

Name
 Address
 website
 Contact details (phone/email)
 What do they provide?
 Do we compete?
 Who are their customers?
 No. of Staff
 Annual report? If so, figures here please!
 What has changed, what are their plans?
 Eco-aspects
 Strong points
 Weak points
 notes

Table 4 – Number of each business type researched

| Location | Bunkhouse | Café/ shop | Energy | Housing coop | Education | Veg Box | Office Space |
|----------|-----------|------------|--------|--------------|-----------|---------|--------------|
| Local | 3 | 5 | | 1 | | 2 | 3 |
| Scotland | 4 | 1 | 1 | 4 | 3 | 1 | 1 |
| UK | | 1 | | 1 | | | |
| World | | | | | | | |

This is analysed in section 2a.

1.5 Desired Elements (PASTE)

For this section I facilitated a meeting of core residents in which we did a PASTE wish list of what we would like to see on the site.

With the heading "In 10 year's time, the site in Burntisland will have ..." we brainstormed under each of the headings, those in black (the first row) are agreed, those in red are controversial, that is we need to discuss and make decisions about them. This shows a lot of agreement about our vision.

Table 5.1 – Desired PASTE written by Core Residents (Plants Animals and Structures)

| PLANTS | ANIMALS | STRUCTURES |
|---|---|--|
| Edible Fruit bushes Fruit Trees Forest Garden Kitchen Garden Woodlands Wetlands Wildflowers Hedges (native & edible) Indoor plants Seedlings | Deer Pheasants Foxes Chickens Buzzards Small wildlife (insects, bats, birds, hedgehogs) Bees (for honey) Frogs/toads | Bee hives Hot composting Paths Public and private access Renewables – wind turbine Electric cables Electricity meters 12 Houses Education centre: café, bunkhouse, shop, toilets Communal space for residents Outdoor gathering space (e.g. amphitheatre, bonfire etc) Human effluent cleansing (Water pipes Drain pipes Storage of cycles, recycling, tools, wood, Shed Fences Play area Greenhouse/poly tunnel Cold frames Car park Workshop area (e.g. joinery) Laundry Office |
| Allotments Coppiced woodlands Living willow maze/labyrinth pond | Dogs on lead Animals for food Fish | Compost loo Social contract CIC/Charity/housing coop Photovoltaics Electric connection/ storage Storage of biodiesel Storage of water (or pipe it in) Walls Terracing septic tank/reed bed or other? workshop space for pottery, painting, weaving, paper making, sculpture, etc. A part of the co-housing network |

Table 5.2 – Desired PASTE written by Core Residents (tools and events)

| TOOLS | EVENTS |
|--|--|
| Gardening tools Building tools Coppicing tools Compassionate communication Energy – electrical sockets etc Stoves Permaculture tools White goods (freezers, cookers) Shared meals Self-employment/ employment Computers, printers Telephone, internet | Ceilidhs Celebrations marking the seasons, months etc Bonfire party Educational events around mindful and sustainable living (indoor and outdoor) Film showings Meditation Tai chi Yoga Tree-climbing Playing Clean up days Work days Planting & Harvesting Gardening/ composting Work Outdoor nursery Therapy Maintenance – renewable energy; buildings, land (paths); hives; Giving birth Funerals & Weddings Naming ceremonies & Coming of age rites Parties (e.g. birthday, graduation etc) Administration and billing (e.g. of electricity, housing, sewage) Visits (e.g. as permaculture demo site) Meetings Watching wildlife Building (education centre, houses etc) |
| Mechanised tools (generator?) Wood chipper | Burials Forest School |

1.6 Surveying prospective customers

The other major part of market research which I did was a survey of people interested in an ecovillage in Scotland (done online using the internet tool "Survey Monkey"¹). The survey was distributed by email through Bodhi's membership, SCI's membership and being forwarded on and on. Such is the way of the internet some of the results were from far flung places, but the vast majority were from Scotland. 156 people responded. The results were analysed into tables shown in section 2.2.

1.7 Local residents and business people

We have done workshops in the school in which children constructed models of the education centre over three workshops. These were later displayed in the local library and people were welcomed to comment on the models and the proposal more generally (Jan 2010).

We held a meeting about the proposal in the Toll Centre, which is the closest community centre. Here we gave a presentation and listened to people's concerns, hopes and aspirations.

Paula has also attended numerous meetings with the community council, councillors, local café & shop owners, landowners, council staff, and others.

There's more information about this in appendix 1.

1.8 Researching Legal Structures

As shown in Diagram 1 the legal structures group (of which I was a member) investigated what the group wanted from their legal structure and thus surmised a list of criteria, as shown in table 6.

Table 6 – the criteria used to compare each legal structure

| |
|--------------------------------------|
| Crucial |
| Allows social contract |
| Allows collective/communal ownership |
| Collecting rent |
| Individual investment |
| Equality |
| Ease of withdrawal of investment |
| Low cost to managing investment |
| Limited liability |
| Allows members to be paid |
| Residents can claim housing benefit |
| Asset lock (ie held in perpetuity) |
| |
| Preferable |
| Raising funds by bank loans |
| Ethical/social nature |
| Tax exemption |

We researched each of the following legal structures, comparing them to each of the criteria in table 6:

- a) Bencom
- b) Cooperative (Industrial and Provident)
- c) Community Land Trust (there are many different forms)
- d) Mutual Home Ownership Scheme (MHOS)
- e) Limited Liability Partnership (LLP)
- f) Charity
- g) Company Limited by Guarantee
- h) Community Interest Company (CIC)

I have much more information on this if you are interested (!!).

2. ANALYSIS

2.1 Site analysis

The site was analysed using limiting factors. These are:

1. Steepness of the slope
2. Rock falls
3. Neighbours
4. Town boundary (currently the Widows' Land doesn't lie within the town boundary, we are looking to extend this)
5. Golf clubhouse
6. Land Ownership
7. Access

In this order

1. Steepness of the slope

It is less steep on lower slopes and very steep as you go up the hillside, see picture 4. The steepest areas will be unsuitable for any development. The lower slopes are still quite steep and will require earthworks in order to build, and possibly terracing in food-growing areas.

Picture 4 – showing steepness of slope of Widows' Land above proposed area of development



There's one flat area right beside the road, this is what is required for a car park.

2. Rock falls

Higher slopes have some trees, but it needs more to stabilise the rocks, and catch any falling ones. There are some rocks caught behind fences quite high up the slope, see picture 5.

Picture 5 – showing rocks caught behind fence quite high up slope

3. Neighbours

The neighbours were invited to a meeting in the local community centre, for more info see appendix 1. In general they didn't raise any objections to the proposed development; however they did raise concerns about the rock falls. One lady was concerned about a decrease in biodiversity (esp. deer) in her garden. This fits with our plan to increase biodiversity.

4. Town boundary

Currently the Widows' Land doesn't lie within the town boundary, we are looking to extend this, however the housing needs to be as close to that boundary as we can.

5. Golf clubhouse

There are some concerns about the clubhouse being directly opposite the land. We could plant trees to screen developments, and make them pretty. We are also considering whether they might be sweetened with the prospect of buying electricity from us, if we can manage generation on an exportable scale.

6. Land Ownership

The Widows' Land is currently entrusted to Fife Council. The top of the hill is owned by a friendly farmer with whom we have had conversations about placing a wind turbine up there, he is open to this idea.

7. Access

Current access is directly from the road (there's a hedge with a gate in it near the end terrace), and from a path which goes straight (North) up the hill through/to the East of the land. There's another path to the West but to reach it one has to traipse through someone else's woodland. We have had conversations with that landowner

who is (theoretically) happy for us to clear and use that access for pedestrians and bikes.

Wheelchair access to the education centre and houses is a statutory requirement, this may cause some problems in levelling a wide enough surface with sufficiently little incline, however it can be done with special materials.

Access to the allotments will need to be direct (without having to go through the rest of the site); access to the education centre will need to be close to the road (for buses etc).

Main Elements

Taken from the PASTE list, I cut out the following elements (to be placed onto map):

- ⊗ Bike, bus & Car Park
- ⊗ Allotments
- ⊗ Education Centre
- ⊗ Wildlife garden
- ⊗ Woodland Walks
- ⊗ Community Forest Garden
- ⊗ 6 straw bale houses (in a terrace)
- ⊗ 6 Earthship houses (in a terrace)
- ⊗ play area
- ⊗ wind turbines
- ⊗ Community Food Growing projects
- ⊗ Reed beds (or other sewages cleansing?)
- ⊗ Swales, & terraces
- ⊗ Outdoor gathering space
- ⊗ Businesses

The last 4 items we decided not to add to the design because they are less crucial to display, and/or not decided. We want a showcase design.

Main Functions

- ⊗ Teaching
- ⊗ Learning
- ⊗ Sustainable living
- ⊗ Growing food
- ⊗ Community building
- ⊗ Playing and fun
- ⊗ Singing and dancing
- ⊗ Watering plants
- ⊗ Generating electricity
- ⊗ Cleansing human waste
- ⊗ Cooking

- ⊗ Eating & drinking
- ⊗ Relaxation/ recreation
- ⊗ Storage of 'waste', bikes, cars, building materials, tools etc
- ⊗ Generate an income (£)

This list could go on and on indefinitely, delineating everything that we need to do to live a sustainable life!! Likewise for yields, but you can see the point is to get some important functions so that we can make sure that we have sufficient elements supporting the main functions and vice versa.

2.2 SWOT analysis of businesses

Having completed the observation and research of the various businesses, I analysed these results in terms of the businesses' facts, strengths, weaknesses, opportunities and strengths (SWOT), as shown in tables 7a and 7b.

Table 7a – SWOT analysis of businesses proposed in ecovillage

| Activi | Bunkhouse | Organic café and eco-shop | Allotments | Renewable Energy Generation | Housing Cooperative |
|-------------------|---|---|---|---|--|
| Facts | 12 Beds (bunks & some double/single rooms) | Have a café which cooks and sells our own produce as well as other local organic food. Surround seats with shelves stocked with organic and local food and drinks; eco-gadgets; organic/local seeds; relevant books; display board for leaflets; act as South Fife local hub/place to go; provide food for courses; walls and cabinets to display eco-art work for sale | Allotments ' standard size is 1/4 acre. Lusi's is 9x6m (54 m2) | We can receive support for community energy projects from www.communityenergyscotland.org.uk . Generation either just for residents and on-site businesses, or also exporting some? | Builds 6 houses in a terrace. Rests, then builds 6 more houses in a terrace. |
| Strengths | Potential profit; enables passing trade; give people on courses a place to stay; a model eco-building, people learn about eco-living by sleeping in the bunkhouse | Potential profit; open door for anyone to drop in without feeling uncomfortable to catch up with gossip, events etc; advertising events; community outreach station; education through displays, sales etc; connection to wider and local communities | Community Interface, Local people gain from project | Supplying much needed electricity (given we are off-grid!). | Once someone has moved in there's a reliable income; There are already lots of people interested in sustainable living |
| Weaknesses | Will need caretaker to look after it. Laundry and cleaning work required. | Competition with local businesses; having adequate space | Little income for amount of land used. Potentially uses a large proportion of the land. | Relying on just one form of electricity would not provide stability. Unsure about reliability or strength of source on site. | Possibly hard to find right person to live there (who really wants to be sustainable throughout their lives) |

| | | | | | |
|----------------------|--|--|--|---|---|
| Opportunities | No bunkhouse nearby; people want to stay somewhere 'different'; inexpensive accommodation; means residents don't have to have a guest bedroom. | Cooperation with local businesses, e.g. purchase from farm shop, or Potter About (local café) is contracted to run café. | Link with interested parties living locally, increase in edge. Possibly increases the chance of us getting the land. | Different types of electricity e.g. wind, solar, hydro, tidal? | To demonstrate Sustainable Living; Gov. climate change policies/bills etc mean they need to support projects like ours. |
| Threats | Risk of damage e.g. fire, theft; Risk of someone else building a bunkhouse before we do | Overheads (Employing staff, rent etc); risk of damage e.g. fire, theft | Risk of fire, theft, vandalism ; Financial risk? (ie little income, but significant land expenditure e.g. for sheds | little hydro opportunity on site, tidal not currently practical on this scale | Large outlay leads to financial risk; risk of damage (e.g. fire, theft, vandalism) |

Table 7b - SWOT analysis of businesses proposed in ecovillage

| Activity | Courses/workshops/ education | Organic veg box delivery scheme | Office space for projects | Overall |
|-------------------|--|--|--|---|
| Facts | Put on courses which will be a combination of short (e.g. 2 hours - 1 day) to long e.g. 1 month. Could be in a range of topic areas largely around ecology, permaculture, community building and NVC. | Grows organic fruit and veg and delivers to local homes | Desks for office staff to share hot desk style (even if full-time so others could use computers etc in evenings). Could be used by workshop leaders, SCI/Bodhi/ Permaculture Scotland/Reforestation Scotland etc | The combination of different activities in one location: lower travel distances; good reputation; sought-after activities (cutting-edge market) |
| Strengths | Would be the only residential educational place in the central belt that does such work; Pulling together the many different strands of sustainable living; specialists in the fields of permaculture, NVC, mindful living, sustainable living; resilience as many different teachers involved | Regular income; contact with local peoples (builds reputation) | Maximising use of resources we will need anyway (stacking); income for office rental; constant presence; local facilities which are not otherwise provided locally | Strong reputation possible; Potential for having a strong attractive force for people interested in these fields. |
| Weaknesses | Hard to pull together all the strands; cumbersome/lots of work; some courses would prefer to camp so cheaper but not much flat land on site; needs paid staff to manage it. | Needs constant supply of food throughout year (inc winter or buy stuff in); we would have to have a van to deliver food (or very slow in horse and cart?). Not typical agricultural land as steep; requires quite a lot of land; likely not as good an income source as food we have processed ourselves (e.g. in café). | Ensuring desks in use majority of the time | |

| | | | | |
|----------------------|--|---|---|--|
| Opportunities | Field research as well as education; demonstration as well as explanation; opportunity to camp. Also opportunity for outdoor nursery for which we just collect rent. | Fife Diet is helping encourage local food; Good part of sustainability agenda. May be better just to sell food processed in café? | For national organisations such as Permaculture Scotland to be based there, it would increase reputation in UK. | Huge interest in growing market; Potential for having a strong attractive force for people interested in these fields. |
| Threats | local competition if a new place gets going at the same time as we do!; damage of education centre by fire etc | Competition with other local farms and veg box delivery schemes | Risk of damage e.g. fire, theft, vandalism; financial risk in building office space. | Risk of damage, e.g. fire, theft, vandalism; large financial risk. |

2.3 Analysing the survey results of customers

The results are shown in diagrams 3-7 and table 8. Of the 156 respondents, 83% said that they would use a sustainable living education centre and organic café; and 78% would use the eco-shop, and only 3% said they would not use any of the facilities proposed. Other facilities offered were also wanted by some respondents: woodland walks (73%), bunkhouse (40%), volunteering opportunities (51%), allotments (29%), and office space (10%).

The survey also showed that the most popular item for people to buy was local food (see diagram 4) with 83% respondents wanting to purchase it, which was more important than organic food (70%, a result which may have been affected by the good work which Fife Diet are doing locally²). Following the food theme, the most interesting workshop of those listed (see diagram 5) was 'Food for Free' (71%), and then 'sustainable building techniques' (62%) with 15 people suggesting other workshops they would like to see.

Diagram 3 – Survey Results for "What you would use/attend in Burntisland, Fife?"

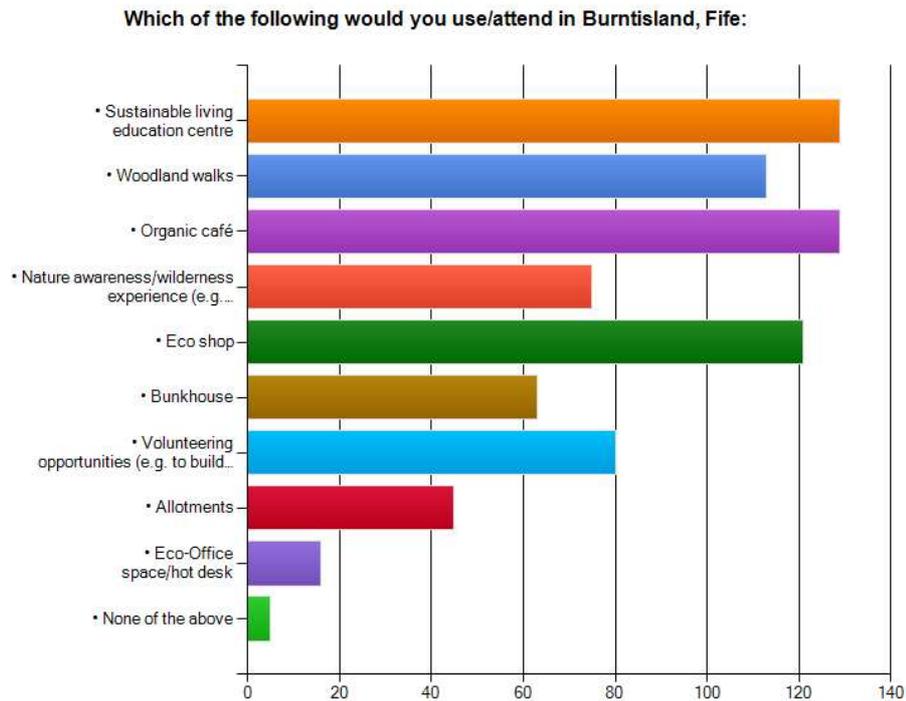


Diagram 4 – Survey results for "What products you would like to buy in Burntisland, Fife?"

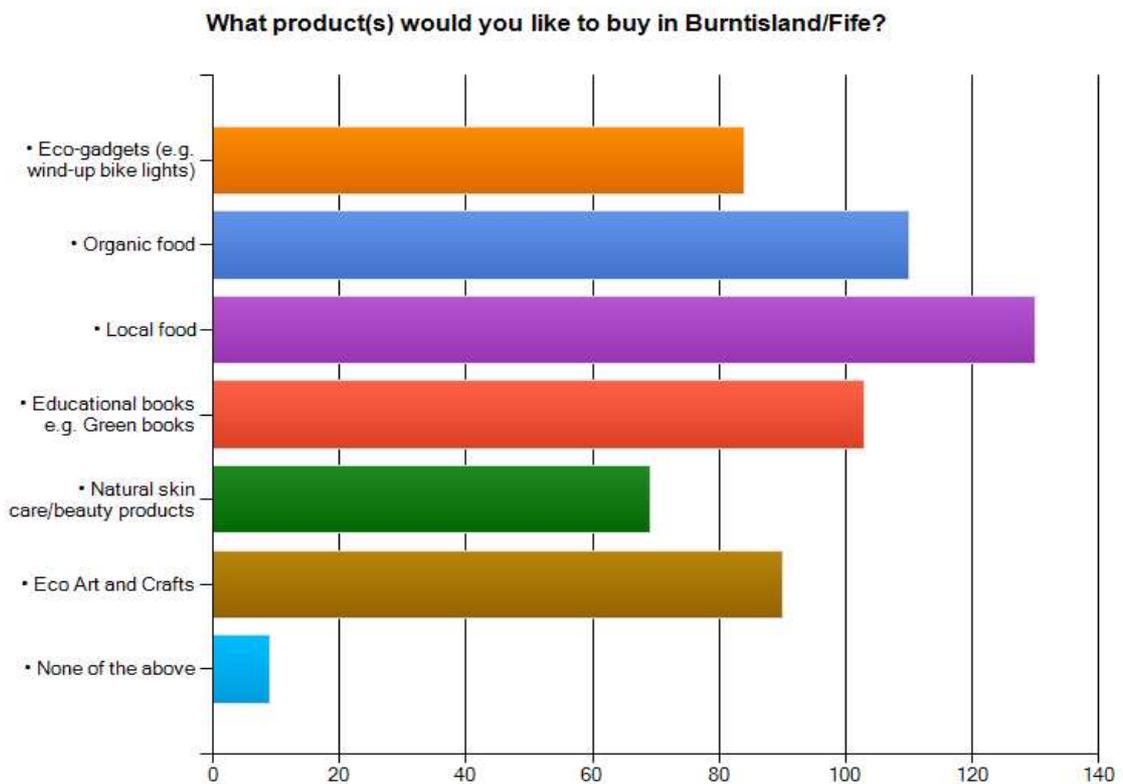
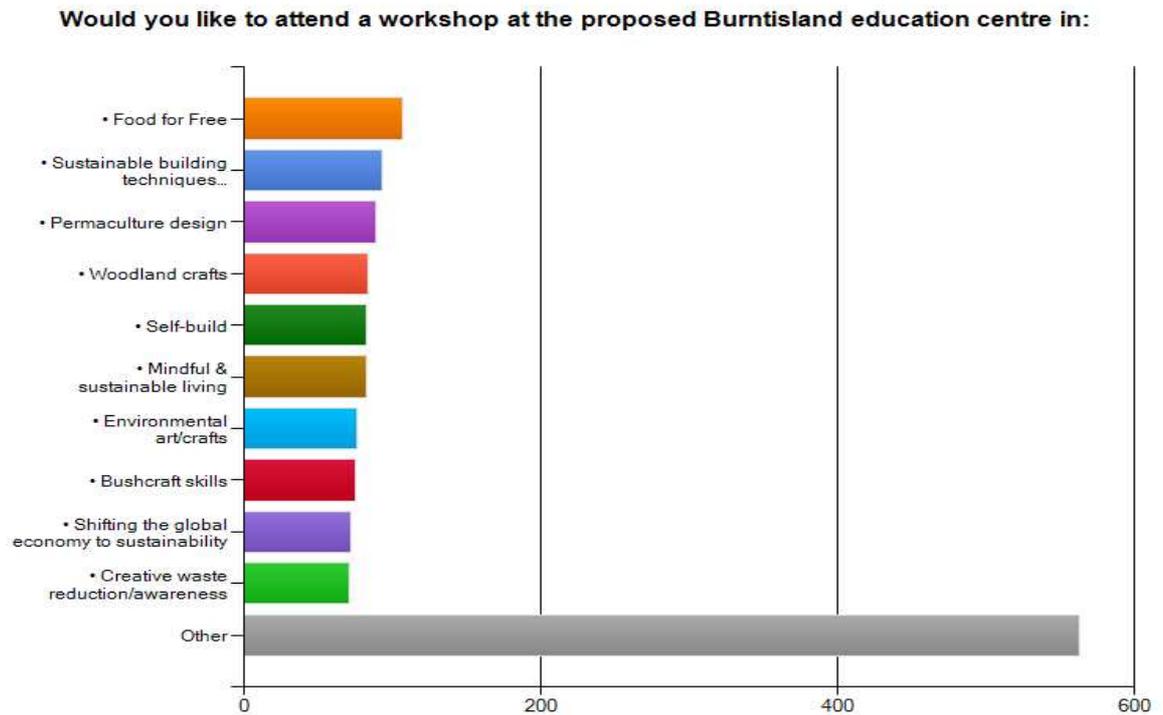


Diagram 5 – Survey Results for what workshops participants would like to attend



The majority of respondents (67%; see diagram 6) would be willing to pay more than £31 on a day-long workshop. Interestingly, nearly half of the respondents were in the age bracket 40-59 years (see table 8). This shows that the people who find our project most appealing are aged 30-59, and are interested in sustainable living and the environment (see diagram 7). This might be what we construe our **target market** to be.

Diagram 6 –How much respondents would be willing to spend on a workshop



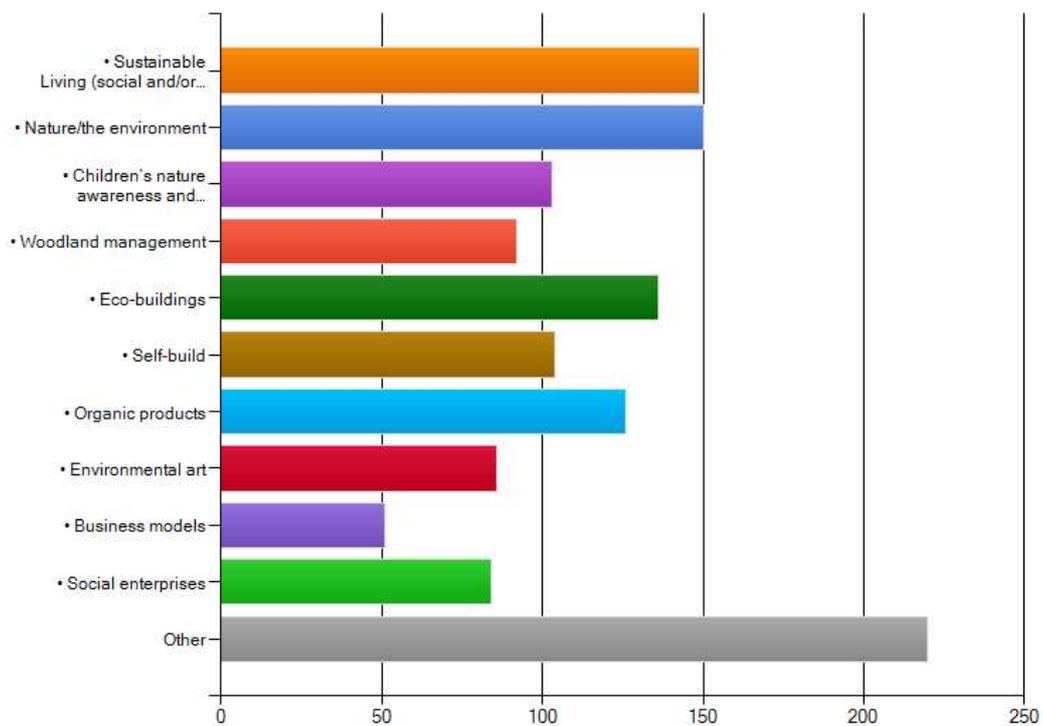
Table 8 – Age ratios of survey participants

Question 6
How old are you?

| Answer Options | Response Percent | Response Count |
|--------------------------|------------------|----------------|
| • Less than 15 yrs old | 0.0% | 0 |
| • 15 - 21 yrs old | 1.3% | 2 |
| • 22 - 29 yrs old | 11.0% | 17 |
| • 30 - 39 yrs old | 28.6% | 44 |
| • 40 - 59 yrs old | 48.7% | 75 |
| • 60 or over | 10.4% | 16 |
| <i>answered question</i> | | 154 |
| <i>skipped question</i> | | 2 |
| | | |

Diagram 7 – Respondents’ interests

About You: Which of the following are you interested in (select as many as you like)?



2.4 Analysing Legal Structures

Comparing the legal structures against our criteria, through a process of elimination – design by limiting factors – we selected the combination of a Community Land Trust owning the land and a Housing Cooperative owning and renting out the housing. The Education Centre will be run by a charity and businesses will likely be self-employed individuals running them. Although complicated, this is the best way to ensure that if one business fails, it doesn't bring down the rest of the project in its wake.

The question which remains is whether the land trust should be a charity or a Community Interest Company (CIC).

I have much more information on this if you are interested (!!).

2.5 How will we build the ecovillage?

This is part of working out how much money it will cost to build the education centre, as the major capital expense of the project after land purchase.

The Core Residents group have a preference for Long-Term Volunteers from around the world with a minimum commitment time (e.g. of 2 weeks, this is common for WOOFers) to build the education centre. We will pay for their food and accommodation, and we may choose to pay their travel too. Someone will need to cook for them – this may be another WOOFer, or we may need to pay a cook.

First we will build the education centre. We will raise funds for this after we have planning permission. We should start the business plan budget from when we buy the land, then call it Year 1, Year 2, rather than naming years.

If we have 3 caravans that will be a maximum of 18 people volunteering for 2 years.

We expect that it will take 6 months to 2 years to build the education centre.

We also discussed whether we will build artists studios before the education centre (to create an early income and/or house volunteers). After the building of the education centre, we will probably want the same staff to build the housing (also an educational project). (At least the same posts will be required for building the houses as the education centre).

Construction of the houses is calculated as a ratio of the education centre, 2-3 houses : 1 education centre, or 6 houses : 2.5 education centres. So to build one terrace of 6 houses, we will require the same staffing, but for 2.5 times as long, e.g. if it takes one year to build the education centre, it will take 2.5 years to build a terrace of 6 houses.

Hence 3-4 years is likely to be the construction period. This will be followed by a rest period before commencing with the second terrace.

3. DESIGN

3.1 Site overview design

The site overview design was a culmination of all the research and analysis and designing done up to June 2010, including the analyses outlined in section 2.5. See diagram 3.

Diagram 3 – Bodhi-SCI Ecovillage plan for the Widows' Land (June 2010)³



The area of the Widows' Land which we plan to develop is outlined in red in diagram 3. Above this we plan to use it for native tree planting only (to improve rock catchment, reducing risk from rocks falling from the crags above, it's too steep for other development).

Other features shown include Allotments, Bike and Car Park, Education Centre, Wildlife garden, Woodland Walks, Community Forest Garden, 6 straw bale houses (in a terrace), 6 earthship houses (in a terrace), a play area, wind turbines, and Community Food Growing projects. There are many others features under consideration including reed beds, swales, terraces, and so forth (please see tables 7a and 7b).

3.2 Mission Statement, Aims and objectives

The mission statement was written when Bodhi first formed a partnership with SCI. I have written the aims and objectives for the group, though they have not been thrashed out by the rest of the core residents group as yet. These are given below.

Mission statement

We aspire to be an example in making the transition from an oil dependent society to an ecologically sustainable society by exploring and finding ways of practising zero waste, zero carbon living.

We are committed to growing a resilient community in which we are compassionate to ourselves, each other and the wider world, through practising mindfulness and honest, clear communication.

Aims and Objectives

It is an ambitious project, which aims to demonstrate zero waste and zero carbon living through an innovative, practical and replicable approach to eco-housing, land ownership, work, transport and food production. It includes a sustainable living education centre with bunkhouse, up to 12 homes, and a number of educational and training projects, small businesses and/or social enterprises.

It is further hoped that the implementation of a zero waste zero carbon community would achieve the co-operation between the community, local government, the community and voluntary sector, social landlords, landowners, housing bodies and associations, individuals and nature that will result in an adaptable and transferable model of sustainable community building.

The aims and objectives of the *XXXX (whatever our name is!)* are to:

- ⊗ Build a zero waste, zero carbon model of sustainable living.
- ⊗ To embody sustainable living in it's fullest sense including social, economic and environmental sustainability.
- ⊗ provide a healthy, sustainable, resourceful environment for

- the whole community
- ⊗ Practise clear, honest and compassionate communication
 - ⊗ Embody the permaculture ethics of earth care, people care, and fair share.
 - ⊗ Advance education, and in particular with regard to:
 - (i) The development and operation of co-housing projects and the social benefits which can be achieved through an ecologically grounded, co-housing approach
 - (ii) ecology
 - (iii) permaculture
 - (iv) principles of compassionate communication and other methodologies for facilitating more harmonious social interaction
 - ⊗ Advance education through promotion of creativity and the arts.
 - ⊗ Operate and/or support other charitable projects and programmes for the benefit of the community.

3.3 Select businesses

Having completed the SWOT analysis and discussed it, the core residents group decided not to pursue the veg box delivery scheme any further, for the reasons outlined as weaknesses and threats in table 7b.

Looking in more detail at these businesses, and the construction work which will be done, the core residents ascertained how many people the ecovillage will employ, this is listed in table 9 below.

Table 9 – Jobs to be created by ecovillage (ascertained July 2010)

| Job Title | Av. No. of Hours per week | Annual wage |
|--|----------------------------------|------------------------|
| Volunteer coordinator | 40 | £20,000 |
| Project Manager | 15 | £15,000 |
| Site Manager | 40 | £20,000 |
| Trainer | 40 | £25,000 |
| Administration work | 14 | £5,824 |
| Fundraiser | 4 | £2,625 |
| Contractors (electrician, plumber, architect, engineer, etc) | 7 | |
| Land Management | 40 | £18,000 |
| café assistant | 40 | £12,000 |
| café assistant | 40 | £12,000 |
| café manager | 40 | £16,500 |
| Bunkhouse reception | 12 | £3,700 |
| Cleaner for bunkhouse | 14 | £4,400 |
| Education Centre Coordinator | 40 | £18,000 |
| Outreach worker | 15 | £11,000 |
| Facilitators/teachers/trainers | 80 | £104,000 |
| Administration and book-keeping | 40 | £18,000 |
| Caretaker/maintenance | 20 | £8,320 |
| Renewables installation | 40 | Unknown |
| Renewables administration | 8 | Variable (it depends!) |
| Artists x 3-6 | 160 | Not relevant |
| | | |
| TOTAL | 749 | £314,369 |
| Number of full time equivalent jobs | 18.7 | |

3.4 Financial Projections and Marketing Strategy

Working out how much each business will spend on wages is a major step towards working out financial projections. In addition, the following work needs to be done:

- ⊗ The equipment required needs to be ascertained, costed and totalled.

- ⊗ The income and expenditures of each of the different businesses needs to be calculated.
- ⊗ All the assumptions when making the above calculations need to be listed.
- ⊗ A marketing strategy, hence prices and income need to be written.

The financial projections thus far calculated are shown in the subsections below.

3.4.1 Community Land Trust Budget

Scenario 1 - CLT owns the land, but the education centre is built by a separate charity, and the housing built by housing cooperative. So CLT just manages the rental income for the land under the buildings.

Table 10 - Projected income for CLT in scenario 1

| Community Land Trust | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Total |
|--|------|------|------|------|------|------|------|------|-------|
| Scenario 1 Income expected/year | | | | | | | | | 0 |
| Donation - private | | | | | | | | | 0 |
| Rent - for housing | | 360 | 360 | 360 | 360 | 720 | 720 | 720 | 3600 |
| Rent - for education centre | | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 4200 |
| | | | | | | | | | 0 |
| TOTAL | 0 | 960 | 960 | 960 | 960 | 1320 | 1320 | 1320 | 7800 |

Scenario 2 - CLT owns the land and the education centre building. Housing is housing cooperative run so CLT just deals with rent of land to coop, and the educational workshops etc are run by external charities e.g. SCI/Bodhi etc. The eco-café, shop and bunkhouse are separate social enterprise(s). The CLT has rental income from office space, workshop space, bunkhouse, and cafe/shop.

Table 11 - Projected income for CLT in scenario 2

| Community Land Trust | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Total |
|---|---------|-------|-------|-------|--------|--------|--------|--------|--------|
| Scenario 2 Income expected/year | | | | | | | | | 0 |
| Donation - private | 200,000 | | | | | | | | 200000 |
| Restricted donation (e.g. from Trust/CCF etc) | | | | | | | | | |
| Bank Loan (e.g. Triodos) | | | | | | | | | |
| Rent - for housing | | 360 | 360 | 360 | 360 | 720 | 720 | 720 | 3600 |
| Rent - for office space | | 1200 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 14400 |
| Rent for workshop space and classroom | 900 | 3,400 | 6240 | 8,000 | 12,000 | 16,000 | 20,000 | 24,000 | 90540 |
| rent (& electricity) for bunkhouse | | | 4800 | 5000 | 5100 | 5200 | 5400 | 5600 | 31100 |
| rent for café/shop | | | | | | | | | 0 |
| TOTAL | 202911 | 6972 | 15613 | 17574 | 21675 | 26136 | 30337 | 34538 | 339640 |

Table 12 – Projected Expenditure & cash flow for CLT

| EXPENDITURE | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Total |
|--|---------|---------|---------|--------|---------|--------|--------|---------|---------|
| | | | | | | | | | 25,000 |
| Land Purchase | 25,000 | | | | | | | | 0 |
| Legal fees | 2,000 | | | | | | | | 2,000 |
| | | | | | | | | | 0 |
| Land Management | | | | | | | | | 0 |
| <i>Labour - project management</i> | 20000 | 20000 | 20000 | 20000 | 20000 | 20000 | 20000 | 20000 | 160,000 |
| <i>Materials:</i> | | | | | | | | | 0 |
| building paths | 10000 | 5000 | 0 | 0 | 0 | 0 | 0 | 0 | 15,000 |
| shed/workshop area | 1000 | 0 | 0 | 0 | 0 | 500 | 0 | 0 | 1,500 |
| greenhouses/ polytunnel | 5000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| fencing | 10000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| trees | | | | | | | | | 0 |
| raised beds/terracing | 5000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| protection from rock fall | 10000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| tools | 10000 | 1000 | 0 | 0 | 0 | 0 | 0 | 0 | 11,000 |
| Land Management - ongoing costs | | | | | | | | | |
| path maintenance | 0 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 7,000 |
| tool maintenance and replacement | 0 | 0 | 250 | 250 | 250 | 250 | 50 | 250 | 1,300 |
| structure & fence maintenance | 0 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 7,000 |
| seeds and other gardening requirements | 0 | 1000 | 200 | 100 | 100 | 100 | 100 | 100 | 1,700 |
| <i>For scenario 2 add in cost of education centre building</i> | | | | | | | | | 0 |
| Total Expenditure/ year | 98,000 | 29,000 | 22,450 | 22,350 | 22,350 | 22,850 | 22,150 | 22,350 | 261,500 |
| Surplus/deficit scenario 1 | -98,000 | -28,040 | -21,490 | 21,390 | -21,390 | 21,530 | 20,830 | -21,030 | 253,700 |
| Surplus/deficit scenario 2 | 104,911 | -22,028 | -6,837 | 4,776 | -675 | 3,286 | 8,187 | 12,188 | 78,140 |

3.4.2 Education Centre

The Education centre budget is only complete for the year of the build, as shown in table 13.

Table 14 – Projected Income & Expenditure for the Bunkhouse

| Bunkhouse | | | | | | | | |
|--|--------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Income expected/year | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Total |
| Visitors' rent | 504 | 10,080 | 14,000 | 17,000 | 21,000 | 24,000 | 26,208 | 112,792 |
| Bank loan (e.g. Triodos) | 5000 | | | | | | | 5,000 |
| Investments (shares?) | | | | | | | | 0 |
| Total income/year | 5,504 | 10,080 | 14,000 | 17,000 | 21,000 | 24,000 | 26,208 | 117,792 |
| | | | | | | | | |
| Expenditure | | | | | | | | |
| Furniture: Beds, tables, lamps | 5,000 | 200 | 200 | 200 | 200 | 200 | 200 | 6,200 |
| Linen | 288 | | 288 | 288 | 288 | 288 | 288 | 1,728 |
| Staff - reception; cleaning; etc | | 4480 | 6200 | 7600 | 9400 | 10,667 | 11,648 | 49,995 |
| Rent, electricity | | 4800 | 5000 | 5100 | 5200 | 5400 | 5600 | 31,100 |
| phone, website, computer use in hot desk office space | | 1200 | 1400 | 1600 | 1800 | 2000 | 2184 | 10,184 |
| advertising | | 200 | 100 | 100 | 200 | 200 | 250 | 1,050 |
| Loan payments | | | 600 | 1000 | 1200 | 1200 | 1200 | 5,200 |
| Total Expenditure/year | 5,288 | 10,880 | 13,788 | 15,888 | 18,288 | 19,955 | 21,370 | 105,457 |
| Surplus/deficit | 216 | -800 | 212 | 1,112 | 2,712 | 4,045 | 4,838 | 12,335 |
| C/forward for cashflow projection | 216 | -800 | 212 | 1,112 | 2,712 | 4,045 | 4,838 | 12,335 |

3.4.4 Housing

The scenario expected is that in year 1, we achieve planning permission for the houses. We start building Phase 1 in April of year 2, and complete the build October Year 3. We have a rest year, and then in April of Year 5, we start building Phase 2 (the second terrace of 6 houses) and complete the building in October of year 6. The

Table 15 – Projected Income & Expenditure for Housing

| | | | | 6 houses | 6 houses | 6 houses | 6 houses | 12 houses | 12 houses | |
|---|----------------|----------------|----------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|
| Income expected/year | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Total |
| Loanstock from CRG (phase 1) | 48,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48,000 |
| Loanstock from CRG (phase 2) | 0 | 0 | 0 | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |
| Secondary loanstock (from contacts etc) | 1,000 | 3,000 | 5,000 | 1,000 | 1,000 | 3,000 | 5,000 | 1,000 | 1,000 | 21,000 |
| Estimated gift/remainder from land funds | 150,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| Rents at an average of £275/mth | 0 | 0 | 0 | 19,800 | 19,800 | 19,800 | 39,600 | 39,600 | 39,600 | 178,200 |
| Total income/year | 199,000 | 3,000 | 5,000 | 20,800 | 20,800 | 22,800 | 94,600 | 40,600 | 40,600 | 447,200 |
| Expenditure | | | | | | | | | | |
| Payback of loanstock with 2.5% avg interest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46,125 | 46,125 |
| Road upgrade | 0 | 25,000 | 0 | 0 | 3,000 | 0 | 3,000 | 0 | 3,000 | 34,000 |
| Architects fees _building warrants | 0 | 8,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,000 |
| (6) Temporary accommodation: caravan | 5,000 | | | | | | | | | 5,000 |
| Groundworks | 0 | 6,000 | 0 | 0 | 4,000 | 0 | 0 | 0 | 0 | 10,000 |
| (3) Terrace 1 (Strawbale 1,2&3 bedrooms) | 0 | 50,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| (3) Terrace 2 (Earthship 1,2&3 bedrooms) | 0 | 0 | 0 | 0 | 100,000 | 0 | 0 | 0 | 0 | 100,000 |
| Project Management | | | 0 | | | | | | | |
| Maintenance/ improvements | | | | | | | | | | |
| Rental of land | | | 360 | 360 | 360 | 360 | 720 | 720 | 720 | |
| Total Expenditure/ year | 5,000 | 89,000 | 0 | 0 | 107,000 | 0 | 3,000 | 0 | 49,125 | 253,125 |
| Surplus/deficit | 194,000 | -86,000 | 5,000 | 20,800 | -86,200 | 22,800 | 91,600 | 40,600 | -8,525 | 194,075 |
| C/forward for cashflow projection | 194,000 | 108,000 | 113,000 | 133,800 | 47,600 | 70,400 | 162,000 | 202,600 | 194,075 | |

Projected income and expenditure are not yet available for the allotments or café and shop.

3.5 Design statement

Proposals have been written and submitted to the local council, including local councillors, and the planning dept. The first was submitted in January 2010 (this is not included because most of it is in the second document). The second is 20 pages long, and is in appendix 1. It was given to the local councillors in June 2010 in order for them to consider our proposal to purchase the land. On reading it they said that they didn't have sufficient information on which to base their decision. They are considering renting it to us, depending on the business plan (and other information), however in December 2010 we plan to submit another (higher) offer.

We also have a design brief for the education centre, going into details of requirements for building the education centre (including sizes etc).

3.6 Design the Business Plan

Designing a complete sustainable village is very complex, as you'll have gathered! In order to complete the business plan I believe that we need to pay a professional to collate the information in a style suitable to convince the local council, and to be sufficiently statistically thorough. The more that I have learnt through this process, the more that I have realised that I am not experienced enough to complete this! When I asked my friend Duncan Wallace, who is highly respected as a consultant to the voluntary & social enterprise sector, he said that he knows "only 2 or 3 people who would have the skills necessary to complete such a business plan, and for me not to know at least 20 means it is a rare skill." Thus I am not going to design the contents of the business plan here.

When I inquired later, Duncan wrote: "I think I know some folk who could help who are fellow associates with me at the Craighead Institute. I would think a combination of Brett Nicholls & Ian McKenzie would be cheap/ and good way of working with you on this. Brett is a chartered accountant, very fast with business plans, and Ian will be really good at understand and shape the context. So I've talked to Jo Kennedy, who is the p/t Director of the Craighead and she suggest the best thing is to have a chat talking through a bit more of what is needed, so then she could think of the best pair/combination of folk to work on this and then develop some options. Jo's number is 07958762773.

Duncan Wallace, 07786050893 - Ideas & Ideals: Ideas Organisational Consultancy, Facilitation, Mentoring, Coaching and Training"

Once the business plan is written, we need to check that it has all of the items described in section 1.3, as well as ensuring that it is concurrent with all the rest of this document.

3.7 Ethics & Principles used in the design

The permaculture ethics permeate the whole design, including having them specified in the aims and objectives of the organisation. Specifically, in the business plan, earth care is apparent, for example it is planned to be disseminated electronically as far as possible; it has been written without printing; and using tools such as PASTE to include as much earth care as possible.

People care is apparent in the business plan as it includes many different facilities for people to use, including a play area, forest garden, allotments, and education centre; and decision-making aims to be consensus.

Fair share can be seen through measures such as considering people without access to a car; home educating families and nurseries.

1. Observe and interact

We have done lots of observation, of the site, of the core residents group, and of local residents and business people (with whom we interacted in workshops and presentation events). I have also researched what needs to go in a business plan and what we are writing one for.

2. Catch and store energy

In the process we have been catching the energy of individuals and using them in the area they are most interested or passionate about, and wrote down their ideas and other input. For example, the legal structures working group were only engaged for a relatively short time, however, the information which they have given us is stored in my hard drives and accessible to anyone who wants it.

3. Obtain a Yield

The main yield is the business plan, however along the way we are achieving coherence of vision, clarity, laughter, interaction with locals and much more.

4. Apply Self regulation and Accept Feedback

For example, when we did the consultation event at the Toll Centre, we accepted feedback which was mainly concern about rock fall, and have thus adjusted our observation, and plans. Similarly, consulting with the school children has helped us to form some ideas about the education centre, and the steepness of the slope on some of the site means that we won't do much work there. The implementation plan includes annually re-visiting the business plan and seeing if it needs any changes to it.

5. Use and Value Renewable Resources and services

Human energy is the main renewable resource which we are currently using, which we do indeed value, for example trying to make the most efficient use of the time which we have together.

6. Produce no Waste

The business plan produces no waste, and will largely be distributed electronically (unless someone requires a paper copy), to reduce waste. The design of the site includes plenty of space for recycling to enable us to maximise our reuse, upcycling, or recycling.

7. Integrate rather than Segregate

The point of the ecovillage is to integrate all areas of life into one small area to work, live, play, and learn. The business plan integrates many different types of businesses together so that we can see the whole.

8. Use Small and Slow Solutions

The process has certainly been slow! We plan to build with volunteers to enable gradual learning, and a slow solution (outlined in section 2.5), moving gradually from smaller structures (including caravans and building art studios), to the education centre, then houses one terrace at a time.

9. Use and Value Diversity

In this design we have diversity of businesses; diversity of people observed; diversity of people designing and building the ecovillage; diverse structures; diverse ways of learning; we even have diversity of diversity!!

10. Use edge and Value the marginal

The Widows' Land site is on the edge of a town; which is on the edge between the firth and the land; the firth is the edge between sea and fresh water; the site is also on the edge of the commuter belt for Edinburgh; in the business plan there's plenty of edge between businesses (as there are so many!); the edges between businesses we hope will also increase edge with the local community, and with travelling visitors.

11. Creatively Use and Respond to Change

The plan includes adaptability to changing climate, both financially (by having several different businesses), and physically (by being far enough up the hill from the rising sea levels).

12. A single element carries out many functions

One element carries out many functions, for example the education centre will have the following functions:

- ✓ Income (money)
- ✓ Outgoing (money)
- ✓ Welcome guests
- ✓ Edge for visitors
- ✓ Nourishing food
- ✓ Buying useful eco-items

- ✓ Bumping into people (develops community)
- ✓ Friendship building
- ✓ Partnership working
- ✓ Learning
- ✓ Working in an office
- ✓ Ordering goods
- ✓ Sleeping (guests)
- ✓ Excreting and urinating
- ✓ Cleansing (self)
- ✓ Cleansing (utensils)
- ✓ Storage (e.g. tools, office equipment)
- ✓ Fun
- ✓ Creativity
- ✓ Exercise (e.g. tai chi or yoga)
- ✓ Stillness or meditation (e.g. yoga)

This list could probably go on indefinitely.

13. A single function is served by many elements

For example, learning is supported by:

- ✓ Café (eating and cooking healthy food)
- ✓ Shop (books to buy and other eco-gadgets/goods)
- ✓ Workshop space (for courses, e.g. permaculture courses)
- ✓ Community Food Projects
- ✓ Allotments
- ✓ Building (workshops)
- ✓ Woodlands
- ✓ Forest garden
- ✓ Houses
- ✓ Education centre building
- ✓ Art studios
- ✓ Play area
- ✓ Wind turbine
- ✓ Toilet system (e.g. reed beds)

Again, this list could go on and on, because the whole project is educational.

4. IMPLEMENT

4.1 How to get the legal structure

I managed to get a hold of a housing cooperative without having to pay anything, other than the annual filing fee, and whilst it is still not in use for the project, I am using it to receive bulk orders from a wholesaler to my home address (they deliver to businesses and coops but not individuals).

If the CLT is to be a charity, there is a long slow process to go through, which may take up to 2 years to complete. A CIC, however can be set up in a few weeks, if all the documents are correct. I have further information on how to do this if required.

4.2 How to write the business plan

As stated above, I am not going to decree how to do this, other than to ask someone with more experience to do it, and to ensure that they include everything in the list in section 1.3, and it is concordant with the rest of this document.

5. MAINTAIN

5.1 Dissemination

The business plan will be converted to a pdf document and sent to the following people/organisations (preferably by email):

- ✧ Core Residents group
- ✧ Bodhi Eco-Project Directors
- ✧ SCI directors
- ✧ Fife Council: councillors, planners, development workers
- ✧ Placed on the Bodhi (&SCI?) website(s)
- ✧ Write to all those who responded to the survey to invite them to download it from the website.
- ✧ Write to all Bodhi and SCI members inviting them to download it.

5.2 Reference and Use of Business Plan

Once we have completed and disseminated the business plan, we should ensure that it is used as a working document to help with future decision making, using it as a core reference in all works.

6. EVALUATE

Evaluation of the business plan should be done by the core residents, all those involved in implementing it and other stakeholders (e.g. employees, long-term volunteers, Bodhi, SCI etc). The business plan should be re-read and reviewed annually, for the first 5 years. This will allow people to update it is necessary to make it relevant to the current situation. It is likely to be of use for at least the next 10 years.

7. TWEAK

The business plan design should be tweaked as and when required at the reviews outlined in section 6, in order to keep it a current and useful document.

8. REFLECTION

8.1 What's gone well?

- ❖ It has been amazing to work with such a great bunch of committed people over the years.
- ❖ Written up this document (it helped get clarity on all the work done and how it fits together).
- ❖ Learnt a lot about group processes, skype meetings, all day meetings, non-violent communication, what goes well and what doesn't.
- ❖ Learnt a lot about ecovillages (and co-housing), working in them, designing them,
- ❖ Met lots of interesting people (both within project and outwith e.g. who I met on stalls).
- ❖ Encouraged by all the people in Scotland (and further afield) who really do want a better world for the future generations, and particularly the amount of people interested in ecovillages.
- ❖ Learnt a lot e.g. about legal structures and writing business plans.

8.2 What's been difficult?

- ❖ Decision-making, by me and from the core residents group
- ❖ Sometimes, working with Paula. Felt like she didn't consider me an equal, but that she was the boss (e.g. she completed a funding application and only sent it to me after she had submitted it, whereas I always sent mine to all the core residents group to ask what they think of it before submitting).
- ❖ Coming up with a design for a very complicated project, and then feeling like I haven't actually designed it (only got the details for someone who can). Aaaah! Frustrating!
- ❖ Working with Adila who wanted to know when we would make the decisions, and didn't always hold similar visions of an ecovillage in a better future and cooperatives working together.
- ❖ Working out what was required of me in terms of the business plan.

- ❖ Uncertainty over the business plan (e.g. at first I was allocated the job of developing the business plan, then it seemed that Paula didn't think it a priority at all. Then it went off the agenda altogether (in July '10) and I wasn't asked to do any tasks so didn't do any work (on the ecovillage) for 5 months, after which it came back on the agenda again.
- ❖ Finding the time and energy to be working on this which is remote from me, since it is physically far away from my life in Glasgow,
- ❖ Doing as careful an observation of the site as I would have liked.
- ❖ Feeling like I am a part of it, but not, in that Danny sometimes said he could see himself living there, and sometimes that he couldn't. This was emotionally difficult for me and affected my commitment to the project.

8.3 What are your long term goals with this project?

- ❖ It's quite hard to know what my long term goals with this project are now that I have handed in my notice! However, if land purchase goes ahead, I would like a really good business plan put in place.
- ❖ If the above 2 things happen, I would like to help build the ecovillage (if I am not busy building elsewhere) and would like to work there, perhaps teaching permaculture courses.

8.4 What are your next achievable steps?

- ❖ The next thing which needs to be done is submit the offer letter to the council, wait to hear if they accept our latest offer to purchase the land. If it is successful:
- ❖ Phone Jo Kennedy to see how much they would charge to write the business plan (get another quote).
- ❖ Get someone to finish writing the business plan.

8.5 What would I do differently?

- ❖ Be clearer from the outset about using the SADI model, this would have helped to reduce the jumping around in terms of when we were doing observation, analysis or design work, and helped to make sure we had all corners covered.
- ❖ I still think us doing the observation and as much of the analysis work and summarising it clearly into the business plan design (as here) is very useful to have done before handing the writing over to a professional.
- ❖ Think clearly about what my level of skills are and try to say 'no' more often! It's hard to know what you don't know, but some research would have been helpful.
- ❖ Ensure that decision making processes are spelled out from the outset. Who is qualified to make what decisions? (e.g.

funding applications' submissions, legal structures). How are decisions made?

Appendix 1 – Full Widows’ Land Proposal – Submitted to Fife Council June 2010.

A Model of Sustainable Living: education centre, food growing, allotments, woodland walks, eco-housing and much more!



PICTURE 6 – THE WIDOWS’ LAND FROM AFAR, IT’S BEHIND THE LAST TERRACE, TO NEARLY THE TOP OF THE HILL.

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(A) 1 Executive Summary

The proposal is for an “ecovillage”; a sustainable community educational model that will move the community towards environmental, social and economical sustainability. Proposed for the Widows Land in Burntisland, it will demonstrate the viability of living without producing waste and living without the need for fossil fuel energy. With both public and residential zones of development, it will have major public access and community provision – by way of an environmental education centre, woodland walks, allotments, community forest garden, wildlife zones, a play area, organic cafe and eco shop.

The project embraces peoples needs for affordable housing, more community facilities, training & employment opportunities, and peoples need for clean open space.

The project will help create a town where people want to live, work and visit, and put Burntisland firmly on the sustainability map.

The project will assist the community in making the transition towards sustainable lifestyles through initiatives on local food, low impact travel alternatives, renewable energy development, waste reduction methods and biodiversity enhancement.

The project has community and the environment at heart. It won't miss what developments today commonly lack - providing people with the opportunity to feel safe, live affordably, work and shop locally, and interact with other members of the community in a social and supportive way.

(A) 2 The Proposal

A POSSIBLE SITE HAS BEEN FOUND FOR A PROPOSED ECOVILLAGE IN BURNTISLAND, FIFE. IT IS A SOUTH-FACING SLOPING SITE WITHIN WALKING DISTANCE FROM THE TRAIN STATION. THE SITE IS KNOWN AS THE WIDOWS LAND AND SITS ON THE EAST BOUNDARY OF THE EXISTING SETTLEMENT, BEHIND LIVINGSTONE DRIVE.

The Ecovillage proposal includes:

- An environmental educational centre for indoor & outdoor learning
- This low-impact education centre will include bunkhouse accommodation, café and eco-shop, workshop space, and offices.
- 12 residential eco-houses
- Allotments¹ & community food growing projects
- Local employment
- Woodland walks
- Eco-housing
- Community Land Trust to manage the land for future generations
- Forestry management programme for residential & educational use
- Renewable energy systems
- Transportation - less than 0.5 cars per household
- Research and development of zero waste zero carbon community models

The education centre and land-based activities will be used by local nurseries, schools, after-school groups, community groups, family groups, work places and in adult education.

(A) 3 The Organisations

The proposal is being made through a partnership between Sustainable Communities Initiative (SCI) and Bodhi Eco Project, both of whom have been offering innovative and life-enriching educational programmes for sustainable living in Scotland for 10 years, and have approximately 200 members each. They are looking to build a centre for sustainable living which models zero waste and zero carbon living as an example and an inspiration to all Scotland's residents.

¹ Fife Diet have been consulted for advice on allotments as they are planing to run allotments in Burntisland town centre. Fife Diet see allotments on the Widows Land as beneficial given the interest they have had for their proposal – there is evidence for the demand.

(A) 4 Background on Site Choice

With the aim of maximising the project's sustainability, site criteria were identified before looking for a suitable site for the ecovillage, namely:

| Sustainable Community Development: Land Criteria | |
|---|--|
| Location preferences | Issues addressed |
| Within 2 miles of train station - easy walking and cycling distance to the most sustainable, fast transport system in Scotland. | Reducing need for cars/fossil fuel; integration with existing communities for sustainability purposes on all levels; income streams for community; local employment potential; reduced commuting |
| Within an hour of Edinburgh or Glasgow | To enable people to visit the education centre easily |
| Edge of settlement | To enable a close relationship with local community and increase possible planning permission |
| Near the coast | Access to the sea is likely to be increasingly important for transportation |
| Relationship with Local Authority | Fife Council have been very supportive and at the cutting edge of sustainability in Scotland. |
| Access from a road | For emergency vehicles & disabled access |
| Size preferences | Issues addressed |
| Minimum 10-20 acres | Sustainability, future expansion if required/permitted |
| Productive land for food crops (minimum 5 acres) | Local food production – income stream, local employment, reduced transport demands though reduced commuting and low carbon food production |
| Woodland (minimum 10 acres) | See below |
| Natural growth/wildlife habitats (minimum 5 acres) | Ecological, educational |
| Type of Land / Habitats preferences | Issues addressed |
| Land not on open market | Budget implications & pressure to bid and purchase within a shorter time frame |
| Brownfield or edge of settlement | Not building in the countryside/greenfield areas |
| South facing slope | Maximum passive solar gain, crucial in eco architecture and sustainable buildings |
| Slopes – slight and steep are both acceptable | Thermal mass design for houses. Provides undisturbed land for ecology/wildlife |
| Mixed mature woodland | Fuel for heating – environmental sustainability – reduced use of fossil fuels Resource for crafts and building material – economic sustainability, local employment Education resource – integration with communities, income stream, local employment |
| Stream | Hydro power - reduced use of fossil fuels |
| Fertile land or land easily put into production | Local food production – income stream, local employment, reduced transport demands - low carbon food production |

SCI began talking to Fife Council about the ecovillage proposal in 2005 – through Craig Walker of the Mid Fife Local Plan Team, to introduce the proposal and

examine the current planning regulations and the presumption against building in the countryside. On examining Housing in the Countryside Policies COU1 and COU3 we identified them as policies to which the development could possibly relate to and meet criteria within. Advice was sought over many months on the most appropriate areas and zones to investigate further for suitable sites.

There was a preference for a site in the Kinghorn/Burntisland area due to the fact that SCI was already based there (with an office, staff, the Earthship Fife Visitor Centre and workshop). It was deemed more efficient to find a site in the area as implementation of the development would require high demand on the organisation's resources.

No sites became apparent in the preferred area and site searching covered the whole of Fife, as well as other LA's in Scotland, for some considerable time. In Fife, the site search team visited a number of sites, for example, *Hiltonhill Farm*

An area of predominantly farmland in the Howe of Fife so the project was contrary to planning policy, with no nearby existing settlement boundary. We explored the rural business option with Hiltonhill, i.e. buying the farmhouse, converting it into a rural business and hence justifying residential buildings. For that route we would have had to enter into a Section 75 agreement with the Council, and would have had to present a business plan which has to go to a rural development consultant. The site was over budget, and not within 3 miles of a train station.

Whitehill Farm

A National Trust for Scotland property in the Howe of Fife – also contrary to policy with no nearby existing settlement boundary. Property had Listed buildings, existing farm tenants and was over budget. Also it was not within 3 miles of a train station.

Dunearn, Burntisland

Several encouraging meetings with the owner initially but he decided eventually he didn't want to sell any of his land. The site was also out with the settlement boundary.

Brownfield Sites

We were keen to explore a Brownfield site initially as "environmental improvement", e.g. reusing an industrial site, suited the ethos of the project well. However the location was critical to ensure we had enough space to demonstrate all sustainability aspects of the project, i.e. enough food-growing land, suitable south-facing aspects and positioning for wind turbines.

We looked at the *Cults Lime Works, South of Pitlessie* but it is north-facing. We investigated buying adjacent land to the south for passive solar design purposes but the landowners were not co-operative.

We also investigated *Shamwell Met Station, East of Tayport*, but again the owner was not interested and also the site had no rail link.

Forestry Commission Sites

Explored the national Forest Land Scheme but it is best utilised and most successful with an existing geographical community, which we don't have. Our group are geographically dispersed.

Most of the above sites had been identified through desktop exercises with Planning Policy Teams in 2008-09 (e.g. Cathy Kinnear, Planner - Local and

Community Policy). There was a open dialogue throughout this process on how policies were being reviewed to support low-impact rural housing and how the rural and urban environment had to be safeguarded, as well as supporting community facilities, rural business, and reduce carbon hungry travel in any development proposal.

We were in effect being consulted on our views on how policy could be clearer and more successful in approving genuine low-impact developments, such as ours as well as preventing unsustainable development in the countryside.

Overall, it was then decided, from these discussions, that the need to find a suitable site within an existing settlement was paramount to its planning success.

In 2007 Stuart Nichol, Strategic Manager, Environment & Development Services had assisted SCI in beginning to search for suitable sites via Fife Council Estates. Local Councillors also engaged with the idea, very vaguely at that time and introduced the Widows Land in Burntisland to SCI.

This was followed up thoroughly with an investigatory visit to the site in 2009 and was identified as a site that met most of the site criteria, i.e. it is within 3 miles of a train station, on the edge of a settlement boundary, not on the open market, south-facing, includes woodland and food-producing land.

In September 2007, as part of the Mid Fife Local Plan consultation process, SCI submitted the ecovillage proposal to Craig Walker, (Lead Officer, Kirkcaldy & Mid Fife Local Plan Team) with the request it be included in the Kirkcaldy & Mid Fife Local Plan, which was being renewed at that time. The letter can be seen in Appendix 1 below.

The planners were clearly impressed by the clear benefits of our proposal and the Fife Local Plan was updated accordingly in 2009 including our project's proposal. See Appendix 2 below.

It is understood by the organisations that this inclusion is not site specific to the Widows Land, but having identified it as a site with the most potential for the ecovillage development, SCI then met with Planning Officers from Kirkcaldy in 2009 to look at the site to explore the potential issues there may be around developing the ecovillage in that location. Monica Kellock was the main point of contact and a site visit was carried out with her in June 2010.

Around the same time SCI also met with Transportation with the same purpose – to identify and access issues with the site.

Once the information from those investigations had been considered SCI approached local Cllrs and Fife Council, Estates to determine the most appropriate route forward.

After a lengthy period the site boundaries were confirmed and at a meeting at the end of 2009 with Fife Council Estates, Assets and Legal teams it was confirmed that the site could legally be sold.

In Feb 2010 SCI began the public consultation process – see Section 7 below.

(A) 5 Proposed Legal Structures

The intended ownership of the site is intended to secure the land in perpetuity for the benefit of the community, i.e. no private ownership.

The proposal is for the land to be owned by a Community Land Trust (CLT). According to the Housing and Regeneration Act, "A Community Land Trust is a corporate body which:

1) is established for the express purpose of furthering the social, economic and environmental interests of a local community by acquiring and managing land and other assets in order to:

- provide a benefit to the local community
- ensure that the assets are not sold or developed except in a manner which the Trust's members think benefits the local community

2) is established under arrangements which are expressly designed to ensure that:

- any profits from its activities will be used to benefit the local community (otherwise than by being paid directly to members)
- individuals who live or work in the specified area have the opportunity to become members of the Trust (whether or not others can also become members)
- the members of a Trust control it.

The proposed CLT wants this land to be held for the good of the community in perpetuity, and would be fully agreeable to sign a contract which states that if the CLT wants to sell the land, it would sell it back to Fife Council first.

The 12 eco-houses will be built by a separate Housing Cooperative, this is separate from the CLT in order to reduce liability and to increase democracy on site. It will not be possible for the housing cooperative to sell the houses without selling the land under them, which is owned by the CLT and under the agreements described above.

(A) 6 Benefits to the Local Community

The proposed project will bring numerous direct benefits to the community, including enhancement of the local environment and biodiversity, woodland walks, allotments, and inexpensive local organic food.

The project will attract many visitors, placing Burntisland on the sustainability map. The education centre will become an integral part of the local community, providing community education, community arts and ecology events, and even a venue for hosting their own events/workshops – from animation to yoga. The café is an integral part of the project, as it will provide a clear link which the local community, as well as passers-by, are always able to drop in and find out news about the project, and perhaps pick up some tips (from the displays and info point) or gadgets (from the eco-shop) to improve their sustainability (e.g. carbon emissions/waste/conflict resolution) whilst they are there. They will also be able to find out about other attractions in the area which they can visit. Visitors will be encouraged to travel sustainably – by public transport, walking or cycling, also increasing the likelihood of visiting other local attractions and shops as they move more slowly.

The extra tourism which this project will attract will bring a significant, year-round boost to the local economy, not just in employment, which will be created with the on-site businesses (e.g. the organic café and shop), but given that these businesses will purchase local goods and services as an ethical and environmental priority, the income generated in the ecovillage will remain within the local area for longer.

The benefits are expanded upon in the following sections under the general headings of economic, social and environmental benefits together with evidence from other similar projects in other parts of the UK.

6.1 The Economic Benefits

- Affordable Housing Provision: 12 eco-houses rented out through a Housing Cooperative
- Reduction in Fuel Poverty: the houses will be extremely energy efficient, eradicating fuel poverty within the ecovillage, whilst eco-renovation and *Transition Town* projects with local residents will improve insulation and energy-efficiency in existing homes, reducing fuel poverty in the local area
- Local Employment: Jobs will be created in eco-building and project management, in the office, bunkhouse, food-growing projects, organic café and shop. Additionally, the educational programme will require workshop leaders, facilitators, and possibly teachers to deliver. Staff will be required to manage the land and bring local community members into the area. Employees will be required to manage an apprentice scheme and a building team.
- Green Tourism: Many visitors to the ecovillage will come from further afield as it is a unique attraction, consequently they will utilise Burntisland's local accommodation, recreational and eating facilities, as well as spending holiday funds, and boost the local economy. Partnerships with these visitor facilities will be formed to encourage local spending.
- Training² for Work: The building will be done through training schemes including Training for Work, and for example, Fife Council's Apprenticeship Scheme and the Carnegie College Sustainable Building Team.
- Economic Diversification: The ecovillage offers economic diversification by not just relying on one industry, and thus increasing the resilience of the local community to withstand economic shocks. The opportunities for cottage industries and small businesses, e.g. crafts workshops, organic box schemes, are central to our proposal.

6.2 Evidence of Economic Benefits in Similar Projects

Findhorn in Forres is a different scale to the proposal in Burntisland, as it houses 450+ residents. However, the economic benefits of this sort of educational establishment are widespread. The Moray, Badenoch and Strathspey Enterprise report "*Findhorn Foundation: Economic Impact Assessment*" (2002) states that Findhorn:

- Supports 300 full-time equivalent jobs, providing £3.1 million in household income in the Findhorn / Forres area.
- Supports 403 full-time equivalent jobs providing £5 million in household income in the Highlands and Islands
- "Helps to generate and support new business start-ups, and expansions in Moray;"
- "Helps to broaden the skills base in Moray."

On a smaller scale to the proposal the Earthship Fife Visitor Centre, which SCI completed in 2004 was the first built fully autonomous Earthship in the UK. When it was open full time (7 days a week) as a Visitors Centre it received approximately 1800 visitors per year. Visitors include individuals interested in

² Please note SCI implemented a training programme in 2002 when they stated building Earthship Fife, the programme was funded by Fife Council Economic development and deemed successful

eco-building and renewable energy, school groups, community groups, planners and architects.

6.3 Social and Community Benefits

There will be significant social benefits of the ecovillage, these will include:

- affordable housing provision
- supporting local community regeneration
- education
- land to grow food – both individually and communally
- community cohesion – people working together to tackle climate change issues
- education centre facility for school, nurseries & playgroup and an outdoor classroom
- care in the community
- enhancement of the site to provide a woodland walk for people

6.4 Environmental Benefits

Behind every decision throughout the development of the ecovillage proposal environmental sustainability was of utmost importance. Hence, there will be many wide and carried means of demonstrating environmental sustainability, including:

- Low carbon emissions
- Best practice in sustainable / low energy building design
- On-site renewable energy generation
- Minimal car use
- Minimal – zero waste
- On-site composting and waste reduction projects
- Native tree planting
- Enhancement of the site; increased biodiversity
- Organic food growing reducing pesticide use
- Local food growing reducing *food miles* and carbon associated with food production

As an exemplary model of sustainability all of the above will wholly apply to those who live on the site, and will increase the applicability of this to other people through practical support and encouragement, widening the benefits to all local residents as well as people from the rest of Fife, and across Scotland.

6.5 Evidence of Environmental, Social and Educational Benefits in Similar Projects

- Increase of resident rural population at the Findhorn Foundation at a time when many parts of rural Scotland are losing population;
- Improvement of Biodiversity in Camphill Communities arising from organic farming methods;
- Creation of new nature reserves in Findhorn Foundation and Keveral Farm (Cornwall);
- Reintroduction of protected species (newts) in Scoraig;
- Diversification of education by the Centre for Alternative Technology in Wales;
- Provision of a venue for a wide range of events and activities for a broad audience (including non-residents) at Findhorn Foundation.

In summary, the benefits of the proposal are expansive and far-reaching from economic boosts to social care, this proposal is thorough, inclusive and genuinely sustainable.

(A) 7 Consultation Process

We have met with many local people including community groups, school teachers and pupils, playgroups, shopkeepers, community councillors, councillors, and other local residents. The support for the project has been both understandably cautious and overwhelmingly enthusiastic, as locals are keen to be involved in the land which surrounds them. Fife are the first Local Authority in Scotland to include remit for a genuinely sustainable development in their local plan which is currently out on consultation, as per our proposal for a zero waste, zero carbon community (including obligatory car-sharing for residents, and off-grid electricity)

Questionnaires were issued to Burntisland Primary School pupils asking the children two questions:

1. "Do you think that it would be useful for us to have a place in Burntisland where you could go and learn more about sustainable, eco-friendly living?"
and
2. "Would you like to go to this place with your family if it was free to people from Burntisland?"

Of the 180 respondents, 75% agreed to the first question, and an overwhelming majority, 83%, said they would like to visit it with their families. Please see table 1, below.

Table 1 – Responses from Burntisland Primary School Pupils

| | | |
|--|---------------------|----------|
| QUESTION 1. Do you think that it would be useful for us to have a place in Burntisland where you could go and learn more about sustainable, eco-friendly living? | YES 127 (75%) | NO 43 |
| QUESTION 2. Would you like to go to this place with your family if it was free to people from Burntisland? | 140 (83%) | 29 |

Secondly, at a Buy Local Christmas Fayre organised by SCI (Sustainable Communities Initiative) which included local shop owners and other ordinary members of the local community, 20 adults were asked whether they were in favour of the following initiatives:

1. allotments
2. woodland walks
3. eco-venue for hire for events
4. sustainable living education centre
5. zero waste zero carbon housing

The responses are shown in table 2 below, all of the respondents said that they were in favour of having all of the above initiatives. They were then asked if they thought it would be useful to have a place in Burntisland where they could learn more about sustainable, eco-friendly living, and if they would visit it? To which all 20 agreed, an overwhelming 100% agreement with our proposal.

Table 2 – Summary of responses to questionnaire asked of 20 adults

| | |
|--|----|
| 1. Allotments | 20 |
| 2. Woodland Walks | 20 |
| 3. Eco-venue for hire | 20 |
| 4. Sustainable Living Education Centre | 20 |
| 5. Zero Waste Zero Carbon housing | 20 |
| QUESTION 1. Do you think that it would be useful for us to have a place in Burntisland where you could go and learn more about sustainable, eco-friendly living? | 20 |
| QUESTION 2. Would you like to go to this place with your family if it was free to people from Burntisland? | 20 |

If we add the school children's to the adults' responses, we get an average of 85% of Burntisland residents (who responded) would like to visit a centre where they could learn more about sustainable, eco-friendly living, such as that proposed.

In December 2009/January 2010 50 letters of support for the project were gathered from the local community, including local residents, Burntisland businesses, the Playgroup, Nursery and School.

A community consultation meeting was held on February 6th 2010 in Burntisland's Toll Centre to get feedback from community members on the proposal for the Widows Land.

The members of the community that attended were mainly from the 2 estates near the site – in other words people who will be most affected by the development.

A lot of people came with information about landslide history and concerns about the safety of building there, which was helpful to the projects development. An initial structural survey of the site is intended, and will be carried out once SCI has confirmation that the land is being made available to them for purchase.

Home education families at the meeting were very supportive of the project as a whole and particularly welcome the education centre as a resource for them, and a way of integrating with children in the wider community.

A presentation was also given at the Burntisland Community Council meeting on March 12th, which was well attended by the public. Issues such as the steepness of the slope and safety concerns were brought up again.

Workshops were carried out over a 3-week period at the Burntisland Primary School where the children of P4K designed and built models for the eco education centre. Their models were displayed at the town Library from March 31st – April 14th, along with information about the proposed project, information leaflets, a project plan and a notebook for members of the public to write any comments. Letters were also written to all PK4 parents informing them of the project and inviting them to attend the workshops or get in touch. One parent joined the workshop, and 1 contacted SCI by email expressing interest and requesting a place at future ecovillage volunteer days.

A report on the consultation has also been submitted for inclusion in the *Burntisland Burgh Buzz* newsletter, April edition, which is delivered to all Burntisland households.

In addition, 152 people have responded to an online survey about the Widows Land proposal. Responses have come from all over the UK, from Totnes to Essex, from Burntisland to St Andrews, and even one from Germany who is interested in attending the ecovillage in Burntisland.

Of the 152 responses, 83% (126) said that they would like to visit a sustainable living education centre in Fife, visit the organic café and purchase local food in Burntisland. For the full survey please see:
<http://www.surveymonkey.com/s/G3GMQ67>

The pre-planning consultations are not considered as a replacement for those required at the time of submitting a planning application, and all necessary actions will be taken as set out in Fife Council's *Pre-Application Consultations with Communities (PAC)* document.

(A) 8 Proposed Next Steps

Once the proposal has been initially accepted feasibility³ studies will be carried out to explore issues regarding steepness, rockfall and landslides, renewable energy potential, and sewage treatment options.

The organisations wish to engage the community further on issues of site design and specific needs and welcome any instruction on how best to do this.

The organisations are agreeable to legal documentation binding them to time lines to complete building works in phased zones in order to avoid a lengthy development phase in an unacceptable condition.

At this stage the organisations wish to know if the Widows Land can be bought for the purposes laid out in this report. Sufficient funding has already been secured for the land purchase. The organisations wish to purchase the site on a subject-to-planning-permission basis.

For further information and responses please contact:

Paula Cowie, Development Manager, Sustainable Communities Initiatives, Earthship Fife Visitor Centre, Kinghorn Loch, Kinghorn, Fife KY3 9YG, 01592 891884, paula@sci-scoland.org.uk, www.sci-scotland.org.uk

(A) 9 Further information

9.1 The Housing

The 12 houses will be primarily Earthships⁴, and Straw Bale⁵ houses, built to a high standard of environmental performance. The house types utilise waste and natural resources in their construction and will be operated under the principles of passive solar design, thermal mass and/or high values of insulation. All the houses will be off-grid, relying on renewable energy for their electricity needs, provide their own water by means of rainwater catchment, and will treat and contain the sewage output on site.

No infrastructure for water, sewage or power will be required for the development.

³ An initial engineers survey has been carried out and general advice such as tree-planting & fencing has been received

⁴ A highly energy efficient building using principles of thermal mass and passive solar design. For more information see www.sci-scotland.org.uk

⁵ For more information please see www.strawbalehouses.co.uk

The houses will be constructed through self-build means and will be defined as affordable housing.

9.1.1 Number of Houses

The sustainability of a zero waste zero energy residential model requires a certain number of houses to be viable, which we estimate as 12. A low number of houses, e.g. 3 houses would not sustain itself. Aspects of the project that need a larger number are as follows -

- A community model for other settlements to follow
- Communal renewable energy systems
- Communal vehicles to reduce carbon emissions per household
- Processing of waste e.g. a communal black water⁶ bed for treatment of sewage
- Changing consumer behaviour – e.g. bulk buying to reduce packaged goods
- Larger scale composting of food waste to aid food growing
- Larger scale food growing to reduce food miles of bought provisions
- Woodland management and harvesting of wood for fuel

9.2 The Education Centre

The Education Centre will provide the development with a facility for running courses and workshops in organic food production, woodland crafts, Permaculture, woodland management, eco building methods and design, low impact living and so on. The building will also serve the purpose of a drop-in Visitors Centre for those with an interest in sustainability.

The building will be constructed using the Earthship and Straw Bale building methods, and as for the houses, will not require any infrastructure relating to water, sewage and power.

The Education Centre will be a source of employment and income for the community, in for example the shop & cafe.

9.3 The Bunkhouse

The Bunkhouse will be of a similar construction design to the Education Centre and will not require any infrastructure relating to water, sewage and power.

The purpose of the Bunkhouse is to provide accommodation for those attending residential courses and visitors wishing to have first hand experience of low impact buildings. The Bunkhouse will be a source of employment and income for the community.

9.4 Public Allotments

25-50 allotments will be created on the site for use by local community residents. Currently there is great demand for allotments⁷ in Burntisland and it is anticipated that organisations such as the Fife Diet and the Scottish Allotment Growers Society, as well as Fife Council will work together with local people and schools in Burntisland to promote local food production and address issues such as food miles/low carbon food with allotment users.

⁶ A blackwater bed is a contained bed where plants utilise the waste and there is no run off

⁷ In the Kirkcaldy area, which includes Burntisland and Kinghorn, there is currently a waiting list of 400 people

The allotments will also be a source of revenue for the community, as will a market garden selling organic food and for the production of an organic box scheme, which will provide local employment.

9.5 Forestry Management Programme

The woodland to the north and east of the Widows Land is currently in a state of neglect and is also used by local residents of Burntisland. Public access will continue and be encouraged through improvement of paths and woodland walks. Forestry management will be carried out for education purposes, to provide a fossil-fuel alternative source of fuel for the community, and for the preservation of the woodland.

9.6 Renewable Energy

As stated above the development will not rely on fossil fuel derived electricity and will seek to provide renewable energy by way of wind and solar power. The anticipated requirements for wind power is estimated as a maximum of 3 *Gaia* 11kW turbines, which have 15m high towers and 9m rotator diameters. As the turbines won't be grid connected 6kW turbines may have to be used, also on 15m high towers but with 5.6m rotator diameters. Our renewables engineer recommends that the turbines be located 100m from houses to eliminate noise pollution.

The ideal location identified for the siting of the turbines is at the top of the Binn hill no further west than the western boundary of the site, and on land belonging to farmer, Steven Wylie. Mr Wylie has been consulted initially about access to his land.

9.7 Transportation and Road Access

The development seeks to limit car use to a total of 5 cars for the entire residential population of 12 households (less than 0.5 cars per household). The site has been chosen on the highly-placed criteria of being located within 3 miles of a train station and on a frequent bus route. The associated educational programmes aim to provide incentives to visitors to use the public transport links. A minimal car parking area will thus be required for the development.

Road access requirements have been discussed with the Transportation Department at Fife Council in an on-site meeting with Darrin McQueen and Mark Wilkie. Access to the south of the site on the B923 was considered feasible with the need for creating a safer junction, and perhaps a one-way entrance and exit system.

9.8 Waste Disposal

The development strives to achieve zero waste in its output. High levels of Reuse, Reduce and Recycling will take place as per the waste management hierarchy⁸. This will be implemented through a community compost scheme, educational, and awareness-raising initiatives, and unconventional behaviour changes on waste within the community.

The proposal will not require any infrastructure relating to waste collection.

⁸ The waste hierarchy is a useful framework that has become a cornerstone of sustainable waste management, setting out the order in which options for waste management should be considered based on environmental impact. For more information see <http://www.defra.gov.uk/ENVIRONMENT/waste/topics/index.htm>

9.9 Research & Development

There will be an emphasis on research and development of zero energy zero waste models for future application of the research findings with the aim of supporting and enabling replication of such practises in communities. The energy-efficiency of buildings, building materials, energy use, waste production and reduction are examples of areas of possible research.

9.10 Linking to Policies and the Local Plan

Under the theme of Sustainable Development the mid Fife Local Plan outlines very important issues and how it will address them. It makes reference to eco-friendly and low-impact housing, which in our experience, is a fairly subjective thing. Some developers consider very few environmental issues but still term their developments "eco" ones. Our tried and tested sustainable building design, the Earthship, pushes the envelope of sustainability further than most other building concepts; to a level it needs to reach if we are going to provide people with affordable homes with long term comfort and security that don't cost too much to heat and run, and don't contribute to environmental degradation.

The Local Plans references to sustainable development address many of the aspects we have proposed in our Sustainable Community Project. We believe in order to implement the commendable changes Fife Council is proposing a demonstration project is essential. Our project embraces all 4 of the main objectives of the Local Plan and would serve Fife Council well as an exemplary model to inspire and support replication, and thus implementation of your objectives.

References

¹ Survey Monkey is a very useful tool for doing any survey of people – you set up a questionnaire online and it collates the results for you. See <http://www.surveymonkey.com/>. I would like to thank the Permaculture Association Britain for allowing me, as a member, to use their membership of Survey Monkey.

² the Fife Diet may have affected these results, for more info check out: www.fifediet.co.uk

³ This was designed on paper by Lusi during a phone meeting with Paula Cowie. This was then given to Tom Wallace who made this beautiful electronic version.