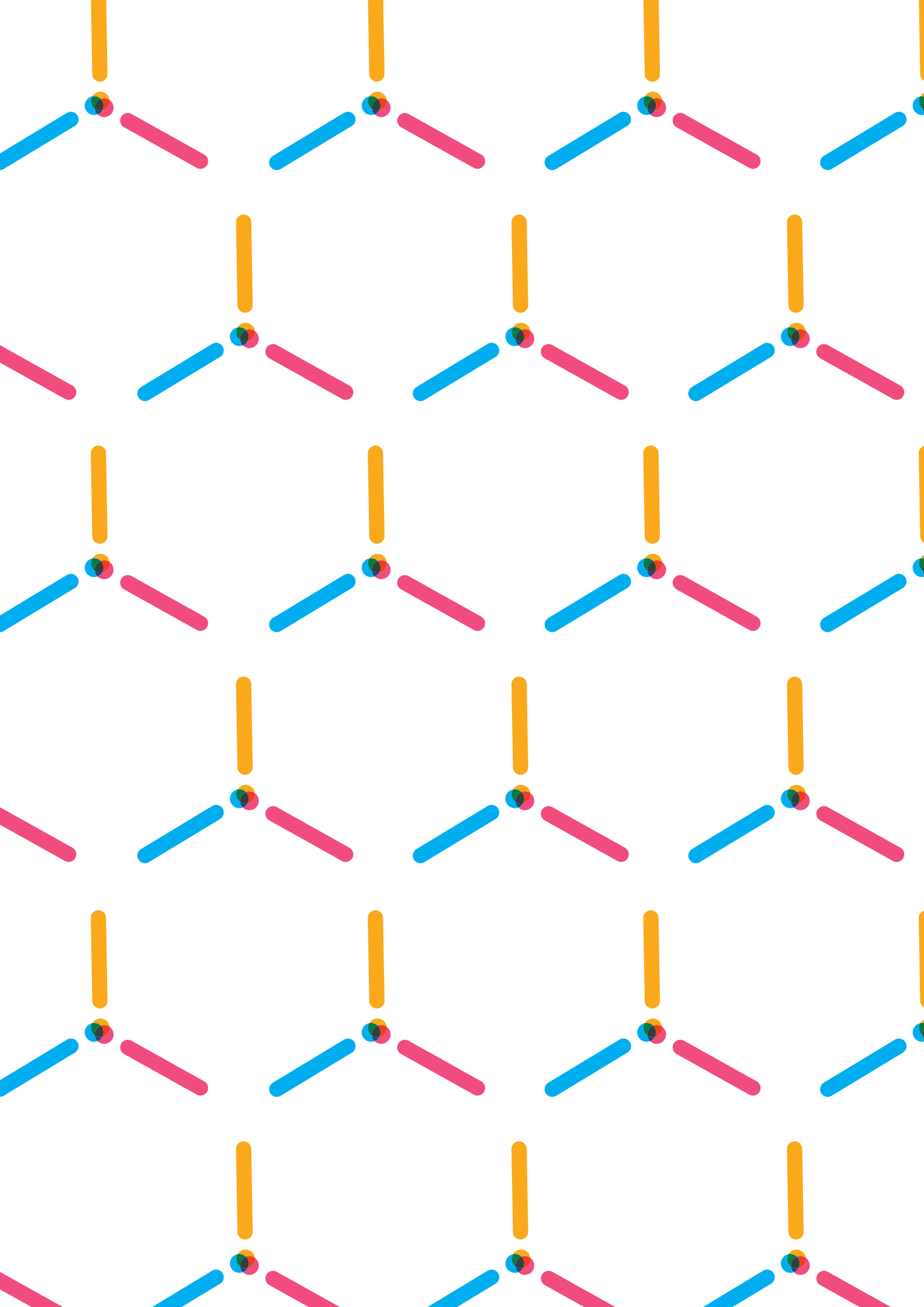


# Opportunities for New Community Energy

A Scoping Report for the  
Radical Renewable  
Art + Activism Fund





**Public funding for the arts is being cut left, right and centre.**

**Commercial sponsorship requires us to compromise our values and ideas.**

**It's time we had a real alternative!**

**The Radical Renewable Art + Activism Fund will use a wind turbine (or an alternative renewable energy source) to fund a 'no strings attached' grant scheme for art-activist projects in the UK.**

# RRAAF Founders

Vicky Adams	Michelle Emery-Barker	Jane Lawson	Bobby Sayers
Danielle Admiss	Steph Fletcher	Joel Lazarus	Janek Schaefer
Shaheera Asante	Hayden Forman-Smith	Ruth Le Gear	Neil Scott
Jonathan Atkinson	Emma Frankland	Ian Lewis	Rajni Shah
Ania Bas	Chris Fremantle	Ann Light	Tamar Shlaim
Matthew Beach	Emily Furneaux	Sofia Lindgren	Naomi Siderfin
Alice Bell	Dawn Gaietto	Rachel Lowther	Eilidh Sinclair
Michael Bonaventura	Nick Garrett	Gavin MacGregor	Joe Smee
Leah Borrromeo	Carl Gent	Fiona MacLennan	Pernille Spence
Bruno Boutot	Joel Gethin Leiws	Hannah Marsden	Joanna Spitzner
Gail Bradbrook	Katie Goodwin	Peter Marshall	Sam Stead
Helen Brewer	Simon Gowing	Russell Martin	Frances Stevenson
James Bridle	Edward Granter	Julie McCalden	Dougie Strang
Neil Bromwich	Rachel Graves	Laura McDermott	Maria Suarez
Mark Brown	Gavin Grindon	Lee McDonald	Eddie Summerton
Katie Bruce	Anne Harrison	Emmie McKay	Diana Sykes
Jon Burgerman	Flo Harrison	Wendy McMurdo	Benny Talbot
John Calcutt	Alex Hartley	Samuel Mercer	Glen Tarman
Juliet Chard	Sayed Hasan	Alex Millar	Jill Tate
Danny Chivers	Alice Haworth-Booth	Charlotte Millar	the vacuum cleaner
Kate Clayton	Rosie Hermon	Ilana Mitchell	Jennet Thomas
Feimatta Conteh	Tristan Hessing	Emerald Mosley	Emil Thompson
Paul Cosgrove	Cathie Higginson	Sorrel Muggridge	Clare Thornton
Amanda Couch	Pete Hindle	Janie Nicoll	Charlotte Turton
Elizabeth Cox	Kate Ho	Kristina Nitsolova	Chloe Uden
Annie Crabtree	Richard Huw Morgan	Ruth Nutter	Gerrie van Noord
A David Crawforth	Zoë Irvine	Sally O'Reilly	Claire Vaughan
Emma Crouch	Edwin Janssen	Julie Penfold	Charlotte Warne Thomas
Morgan Curtis	Will Jennings	Shyama Persaud	Gary Watt
Ben Dalton	Sholeh Johnston	Cat Phillipps	Cecilia Wee
David Daniel	Caroline Jones	Alison Philp	Eilidh Weir
Grace Davies	Cheryl Jones	Ambar Quijano	Tom West
Michele Davy	Michael Kalirai	Angela Quinn	Alberta Whittle
Keith Dodds	Nikki Kane	John Read	Emily Wilczek
Alberto Duman	Alex Kelly	Josephine Reichert	Alex Wilde
Audrey Dunning	Sophia Kosmaoglou	Emma Reid	Shelagh Wright
Graham Dunning	Pippa Koszerek	Ian Rimmington	Mary Yacoob
Alastair Eilbeck	Eileen Laurie	Amanda Roberts	Petter Yxell
Yara El-Sherbini	Gemma Lawrence	Sara Robertson	Kerry

The Radical Renewable Art + Activism Fund (RRAAF) was initiated by artist Ellie Harrison in 2015, with the help of Beaconsfield Gallery in London, the Centre for Contemporary Arts (CCA) in Glasgow and Creative Carbon Scotland.

The project has been supported by the 156 people (listed opposite) who backed its successful crowdfunding campaign, now known as the 'RRAAF Founders'.

The following Scoping Report, written by Community Energy Scotland, has been commissioned by the RRAAF Founders. Their ideas and hopes for RRAAF are quoted throughout.

**“Looking forward to seeing what this generates...” Janie Nicoll**

**“I’m thrilled to be involved - as an artist and as a human being - in something that is about creating systems that we believe in and finding ways to support each other and be braver together.” Rajni Shah**

**“Activist art needs ‘unrestricted’ funds and this is a great initiative to use the production of one sort of renewable energy to support the generation of another sort of energy, one that provokes and challenges.”  
Chris Fremantle**

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- 5 Sites
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- 7 Business Models
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'Publicity Stunt' with the RRAAF Mascot at Beaconsfield, London in October 2015





# Preface

## by Ellie Harrison

It's so exciting to publish this Scoping Report and to see this ambitious project, which has already been in the pipeline for nearly two years, finally start to take shape.

The idea for RRAAF came out of Campaign Lab - a nine-month 'economic justice' campaigning course coordinated by the New Economics Foundation in London, which I undertook in 2013-4. In the wake of continued cuts to public funding for the arts, and the increased pressure to seek private / corporate sponsorship to fill the gaps, I became interested in developing a new model for an alternative funding system, which would offer a real working alternative, as well as a critique of the status quo.

In October 2015, RRAAF was given a huge boost, when I was invited to participate in the 'Harnessing the Wind' exhibition at Beaconsfield in London. I used this as a platform for launching the crowdfunding campaign; staging a series of 'publicity stunts' and public events to raise awareness for RRAAF. Crowdfunding not only raised the money necessary to commission this Report, but it also helped to locate and define a new type of 'community'. Not the geographic community that Community Energy Scotland would normally work with, but a 'Community of Interest' - supporters all around the UK who want to challenge the vested interests inherent in other funding streams and, in doing so, help to inspire and initiate positive social change.

**“If art is to function it needs to be disruptive and occasionally occupy the deadly ‘space between’. Artists need to be brave and have funding that doesn’t compromise their vision. Radical art needs a radical funding solution.” Nick Garrett**

**“Hallelujah!” Carl Gent**

# Introduction

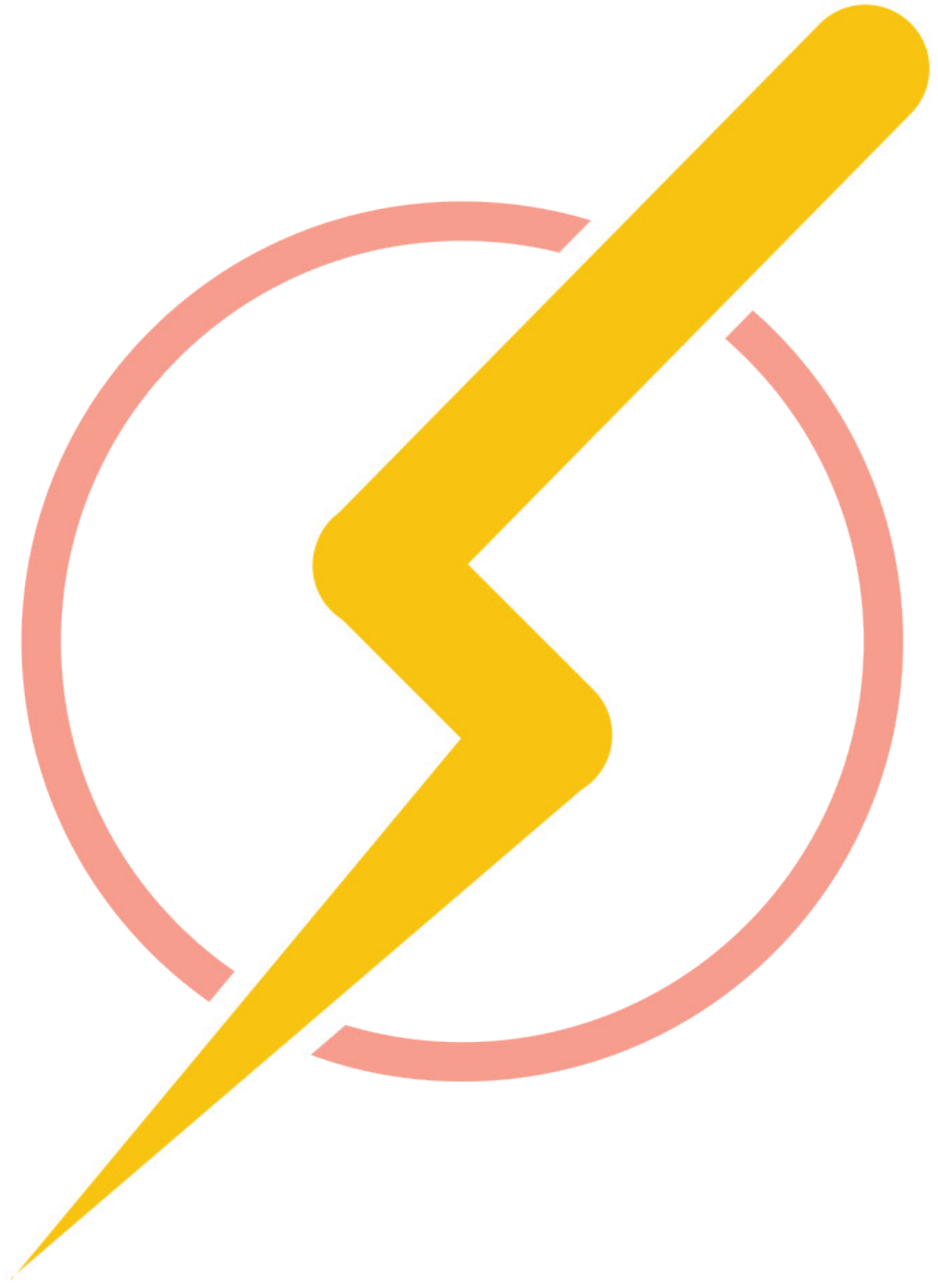
## by Community Energy Scotland

Community Energy Scotland is a membership based Scottish Charity which aims to increase confidence, wealth and resilience at community level through sustainable energy development. We have been engaged by RRAAF to provide early stage support and advice on the set up of a community energy project that will provide a sustainable source of independent arts funding.

Developing a community energy project is never quick or simple, and recent cuts in government support will make this even harder. However RRAAF's new approach, and the support it has already had from individuals and organisations, puts them in a good position to succeed and become an example for other projects to follow.

This report highlights key decisions and challenges that the RRAAF 'Community of Interest' will face in planning a revenue-generating community energy project, assuming that:

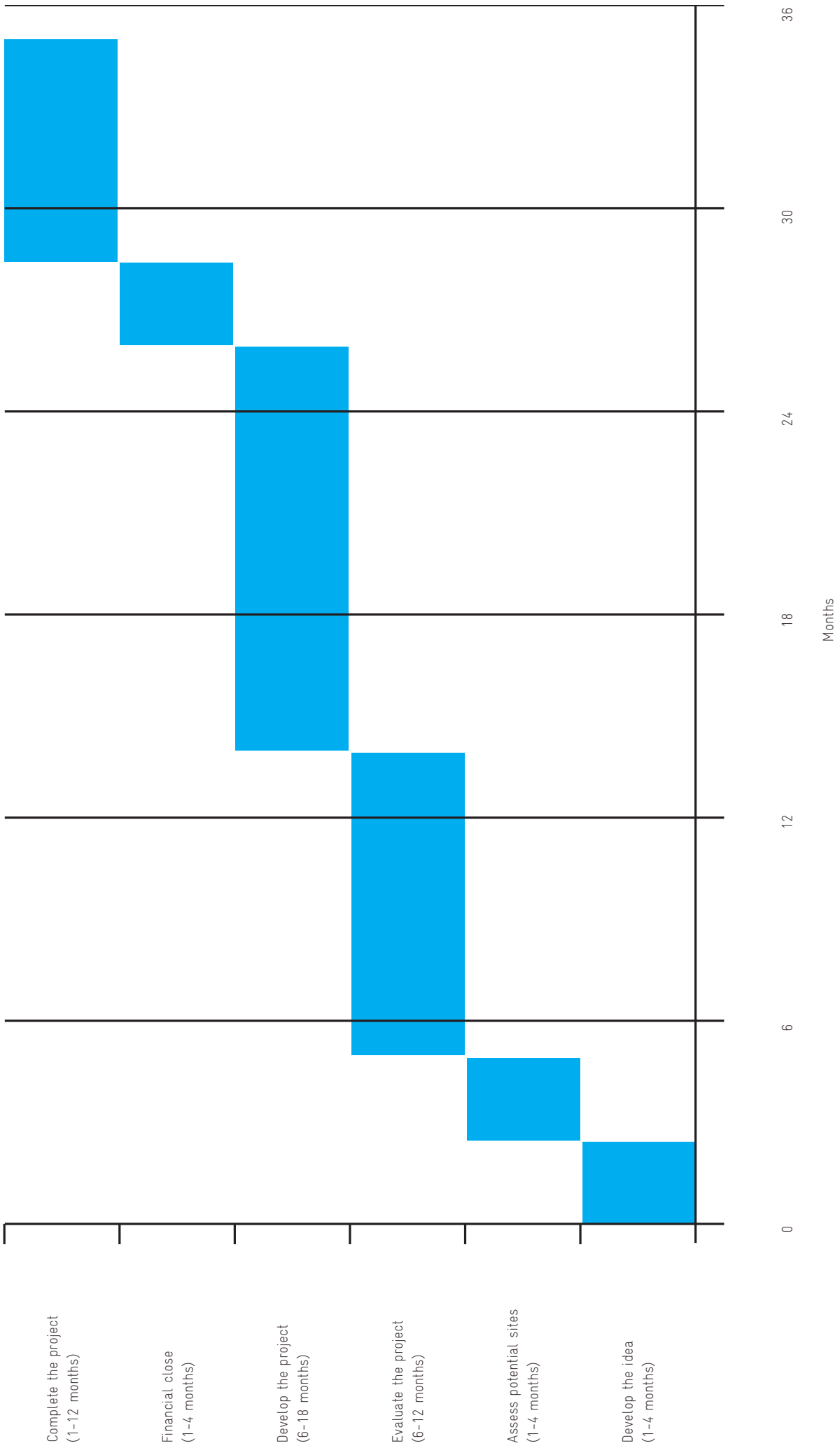
- RRAAF intends to develop a not-for-profit community energy project which will generate in the region of £30,000 or more per year.
- RRAAF hasn't decided on a specific site or technology, although the preference is for wind power on a site in or near Glasgow.



# Project Route

Developing an income generating renewable energy project takes time and determination. Community projects notoriously take longer than private developments due to much more thorough community consultation and democratic processes; however the end gains are worth the wait.

The diagram on the following page describes key activities and milestones for planning and construction of a renewable energy generation project, alongside example timescales. Each stage is summarised below. For a detailed explanation and breakdown of tasks, explore Local Energy Scotland's CARES resources in the Resources Document which accompanies this Report.



## 1. Develop the idea

This is where we are now. From October – December 2015, RRAAF has used social media and a crowdfunding campaign to mobilise a **group** of people around an idea, and raised **initial funds** to begin to make it a reality.

The RRAAF Founding Symposium, to be held in Glasgow in 2016, will provide an opportunity to bring together key members of this **group** to pull everything together; formally constitute RRAAF, and begin developing the project in earnest.

## 2. Assess potential sites

To go forwards, we need specifics. The key tasks of the **group** will be to **identify sites** and if desired, **partner organisations**. RRAAF may want to commission basic **scoping studies** into the potential of each possible site.

RRAAF will likely finalise its incorporation as a legal entity at this stage.

For stages 1 and 2 CARES start-up grant funding of up to £10,000 should be available and it is advised that this is applied for early in 2016

## 3. Evaluate the project

The next stage will be to decide on a **specific site** and technology and then to secure project **development funding**; ideally including support for a project manager and specialist feasibility work over the next 6 – 18 months.

Conduct a **full feasibility study**, and if necessary install monitoring equipment (e.g. a met mast to gather data on site wind speeds, or meters to monitor electricity demand in a project where you aim to use the energy you generate onsite).

Begin a **pre-planning consultation** and speak to the council, the landowner(s), and local residents. Contact the electricity network operator to check there is likely to be **grid access** for the size of generator you expect to install.

## 4. Develop the project

If your site still looks promising, time to start work in earnest. Decide on the detail of your installation (e.g. which turbine make and model will you use?) Draw up a detailed financial analysis and make the **business case** for the project, including securing **quotes** from contractors for supply and installation of hardware.

Decide how you will **raise capital** to pay for main installation, and begin this process. Depending on the status of existing project funding, you might need to find **further funding** to support you in developing the project.

Apply for **planning permission** (which may require environmental and visual impact studies); an **export license** from the electricity network operator to allow access to the grid; and **lease** and **way-leave** agreements with the landowner(s) to rent and allow access to the site.

## 5. Financial close

Raise any **bridging funds** you may need (e.g. to cover deposits on your turbine and grid connection), and once all permissions have been secured and your finances look solid, **confirm contracts** for supply of hardware and installation.

Finally, **raise the capital** you need to install (could be over £1million). At this point funding agencies and banks would be prepared to release large chunks of money as loans. Alternately, if you have decided to raise capital through donations or a community share offer, these should now be confirmed and concluded.

## 6. Complete the project

It's really happening! Repay feasibility loans from the main capital sum, and begin setting up your processes for distributing money through the community benefit fund, while you wait for the construction to be completed.

'Publicity Stunt' with the RRAAF Mascot at Beaconsfield, London in October 2015





# Legal Structures

RRAAF aims to constitute as an 'incorporated' legal entity shortly after its Founding Symposium in 2016. RRAAF should choose a legal structure which provides:

- An organisational entity which can sign contracts and handle large flows of money while limiting the financial and legal liability of members should anything go wrong.
- A legal framework suited to raising large sums of money (i.e. acceptable to funders and banks and ideally able to raise its own funds through share offers).
- An 'asset lock' preventing use of RRAAF funds and property for private gain.

There are many possible legal structures RRAAF could adopt, the best candidates being a **Company Limited by Guarantee**, **Community Interest Company**, or a **Community Benefit Society**. These are described in detail in the Resources Document which accompanies this Report.

**“Arts funding is inseparable from ethics. I don’t want to live in a world where only wealthy individuals get to decide what gets shown and made in our galleries and communities. Funding schemes like RRAAF will retain the mix we need for a healthy cultural sector that supports the widest range of individuals and projects, help challenge the status quo and link audiences more closely with the projects that get funded.”**

**Russell Martin**

The vast majority of community energy projects in Scotland started out from a **Company Limited by Guarantee** (CLG) structure, often with charitable status. The company is then likely to create a new trading arm which will be wholly owned by the parent company, with the profits gift aided back up to the charity, OR, a **Community Benefit Society** (CBS) that will raise capital funding for the project through a community share offer. Whilst a CBS is a separate legal entity to the CLG, rules can be written to ensure that profits from the sale of renewable energy go to the intended purpose.

The right structure for RRAAF will be determined by agreeing why the organisation exists, establishing the vision, mission and values and going through the business planning procedures e.g. who will run the organisation, how you will raise finance, who are the potential partners etc. All these questions should be addressed at the Founding Symposium and a key outcome from the event should be to agree the formal constitution or 'articles of association', detailing the organisation's **aims + objectives** as well as its **governance structure**.

Template articles of association are available online from Companies House, Co-operative Development Scotland and other organisations. RRAAF should be able to identify a suitable template which can be adopted with only minor changes to the size / composition of the board of directors, and the addition of the RRAAF statement of **aims + values**. Indeed, the closer the articles of association resemble a previously accepted template, the easier, quicker and cheaper it will be to incorporate.

**Directors** will normally be elected by the membership at general meetings, however the constitution will define how often they must stand for re-election, and could mandate other requirements such as gender balance. RRAAF will also need to decide how many (if any) places on the board are reserved for unelected directors appointed by partner organisations, or 'co-opted' by the board to provide particular skills needed in running the organisation. Finally, RRAAF will need to decide which decisions are reserved, and cannot be taken by the board alone but must be put to the full membership.

All the legal forms recommended here are based around a **membership** which has final decision making power at general meetings, and a **board of directors** which takes decisions between meetings, and manages the day-to-day operation of the organisation.

Embroidered logo on a RRAAF boiler suit worn by RRAAF assistants at the 2015 launch events

Radical Renewable  
Art + Activism Fund

# Sites

This section details the general requirements for a good site, and outlines approaches RRAAF could take to finding a suitable site to work on.

## General Site Requirements

When considering a site, remember these key elements. They are necessary for getting maximum value from a renewable energy generator:

- Be close to a large (three phase, 11 or 33kV) electricity pylon route. Ideally within 1km, certainly no more than 5km away.
- Have a sympathetic land owner, and be in an area with good local support for renewable generation.
- If possible, have a source of electricity demand onsite or very close by. Direct local use of your electricity makes both environmental and financial sense.

## Particular requirements for a wind site

Have high average wind speeds and few obstacles nearby, especially in the direction of the prevailing winds<sup>1</sup>; be as far as possible from habitation to minimise noise impact; beware of sites close to an airport, military base or bird migration route.

## Particular requirements for a solar PV site

A mainly south-facing<sup>2</sup> or a flat roof, field or wasteland; a minimum of surrounding trees or buildings that would shade the solar panels. If in a city, be aware of whether the local community are actually already using 'abandoned' pieces of land, and of any risk of vandalism.

## RRAAF approach to finding a site

The requirements described above make siting a sizable wind or solar project within an urban environment somewhat problematic. However, RRAAF has a wide area within which to look, and many contacts to help make this search easier.

The best place to start is probably to assess what feasibility work has already been done, and what other organisations might be interested in collaborating to provide or develop a site. The diagram on the following page shows a strategy based on these principles.

1. As a general rule of thumb, sites that have average wind speeds of over 5m/s at a height of 10m are considered viable options.

2. Due south is best, but southeast or southwest facing sites may also be viable. For a project aiming to use PV energy onsite, southwest could work well as it would lead to higher generation during the evening period of peak electricity demand.

START: Is another organisation attempting a similar renewable energy project?

Yes

No

Are the other organisation's goals aligned with RRAAF's?

No

Yes

Are the other organisations willing to work with RRAAF?

No

Yes

Has the other organisation identified a suitable site(s)?

Yes

No

Are existing feasibility studies available for projects that have not progressed?

Yes

No

Is the site suitable and available for progression?

Yes

No

NEW SITE REQUIRED. Does desktop study identify suitable / available new sites?

Yes

No

END: Proceed to Site Assessment

Opportunities that Community Energy Scotland (CES) are aware of:

1. Glasgow City Council have already carried out feasibility work to look at sites across the city which might be viable for renewable energy generation. The full report is available online.

Contacts within the City Energy Team at Glasgow City Council have expressed sympathy for RRAAF's aims, and would be open to discussing potential sites for development directly with representatives of the group in more detail.

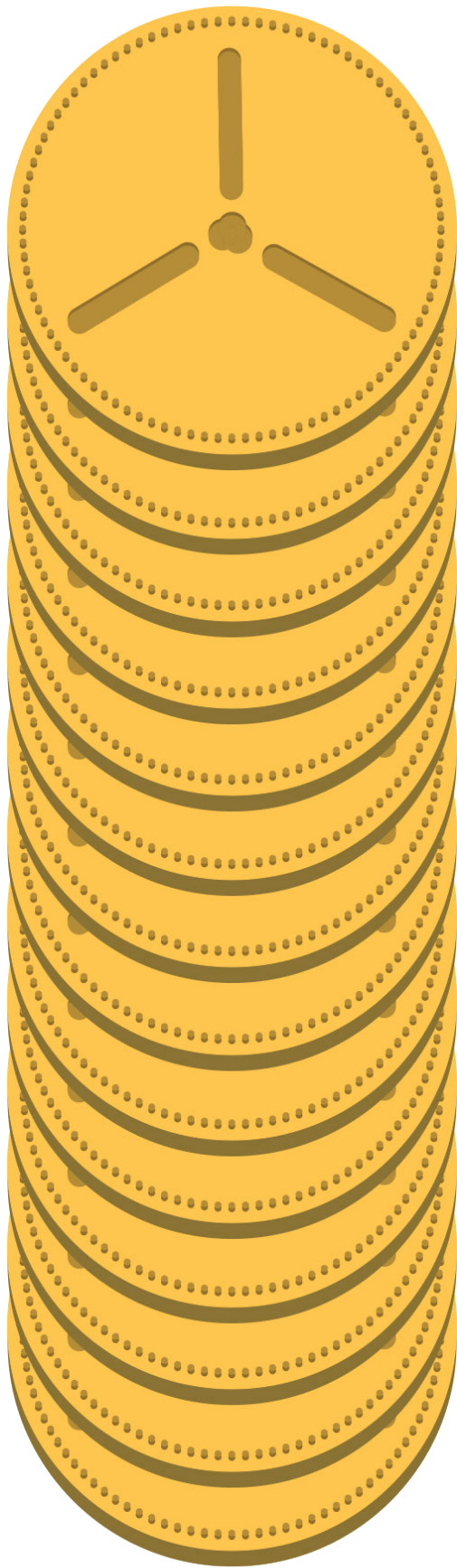
2. RRAAF has strong links to the CCA and other arts organisations. Rather than go with one large site, RRAAF could opt for multiple smaller sites, and install PV on roofs owned by arts organisations.

3. Elsewhere in the UK, activists have worked with anti-fracking campaigners to develop renewables on fracking sites as a positive campaigning tool.

RRAAF already has support from campaigning organisations such as 10:10, and could approach anti-fracking groups in the central belt.

4. CARES funding will likely require RRAAF to have a relationship with a local group and pass on at least 10% of profits to the local area. RRAAF could go further, and approach a locally based community organisation with an offer to collaborate in developing a project and split the community benefit.

Perhaps due to current government hostility to renewables, the number of community groups looking to develop new projects has fallen. However CES is aware of at least one group which could be interested in this approach, and is happy to keep RRAAF in mind when discussing with other groups.





# Financing Options

This section gives the options available to RRAAF for funding the development of the project and installation of a renewable generator.

## Start-up financing

Money will be required to pay for feasibility studies, planning and grid applications, community outreach work and a project manager to keep everything together. Until a project has reached financial close, financial returns cannot be guaranteed, so initial funding must be from grants or 'no strings attached' investment, rather than loans or shares:

The total start-up funding required by RRAAF to develop a large scale community project could be £100,000 or more, over a number of years. RRAAF has already raised £2,505 through its initial crowdfunding campaign allowing work to begin on the project, but will need to focus on securing further start-up funding over the coming months

RRAAF's first point of call should be the Scottish Government's **CARES funding** scheme, designed to support community groups at this stage. Detailed information on CARES is included in the Resources Document which accompanies this Report, but, in short, CARES offer a grant of up to £10,000, and / or a loan of up to £150,000 to be repaid if the project succeeds. RRAAF's operating model may also allow it to secure start-up funding from other less conventional sources, such as:

- Arts Councils and other art and / or activism related funders

- Individual backers from the arts community

A discussion with Local Energy Scotland (administrators of CARES funding) reveals that provided an eligible organisation applies to the scheme on behalf of RRAAF, up to £10,000 of start-up grant may be available, part of which could support the Founding Symposium to take place in 2016. However, because the focus of the CARES scheme is on 'Community of Place' rather than on 'Community of Interest' it is likely that RRAAF will need to pay community benefit from their scheme to the local community, or, preferably partner with directly with them.

## Capital funding

When the project reaches financial close, a large amount of capital will need to be secured (e.g. around £1million for a 1MW wind turbine). There may be a chance to raise significant capital through grants and donations; however, the normal route for raising the bulk of capital would be through long-term debt financing.

Debt financing could take various forms, with the two most likely being a **bank loan** or a **community share offer**. At present, we envisage that the route best fitted to RRAAF would be to use a community share offer to raise all or at least a sizeable proportion of the funds required, however the best route may depend on the type/size of generator, government incentives at the time of commissioning and RRAAF's operating model. The options and restrictions of pursuing each funding type are explored in detail in the Resources Document which accompanies this Report.

**“RRAAF is exactly the type of inspirational project that is needed to re-think the relationship between art, economy and the environment. Let’s renew and repower the radical and independent! I am truly excited and touched by the proposition of this project and the networks it will undoubtedly create.” Cecilia Wee**

# Business Models

In simple terms the business model for community renewable energy projects comprises the following steps:

1. **Funds are raised** by the group through a mixture of grant, loan or share equity
2. The group then **invests** that money in project development and capital costs
3. Once construction is complete, the group receives a **regular income** from the electricity generated for around 20 to 25 years<sup>3</sup>
4. The **loans are repaid** and / or **dividends** are paid on community shares. Over the lifetime of the project, all loans are paid off and / or shares are bought out
5. Each year, operating **profits are fed back into the community**

## Key factors influencing a business case

**The cost of installation:** This will affect the capital investment needed and consequently the amount of fundraising required. Such costs tend not to vary significantly between different sites unless there are particular site access or grid access issues, but can be greatly affected by economies of scale – meaning that larger projects are more cost effective than smaller ones.

**The cost of borrowing money:** The level of interest paid to a bank or shareholder can significantly affect the viability of a project, as well as the loan repayment period. Community shares will tend to achieve a lower interest rate (3-5%) compared with

bank loans (7-10%).

**The amount of energy generated:** The quality of the site (e.g. how much wind or sun it receives) will be the most important factor in determining how much electricity you generate each year. This is often referred to as the 'capacity factor' – the ratio between average power output and rated power output from the generator. In the UK, wind energy tends to have a capacity factor of 25-30% and solar PV tends to be in the range of 8-12%.

**The price received for selling electricity:** Together with the efficiency of your generator, this will determine your annual income. The wholesale price of electricity in the UK is around 5p/kWh. Until recently the Feed-in Tariff topped this price up to 10-20p/kWh for medium scale wind and solar.

3. Income will come from the sale of electricity to the grid via a 'Power Purchase Agreement' (PPA) with an electricity supplier; plus any government subsidy (e.g. Feed-In-Tariff), and / or any payment received from a local load for direct use of the energy.

Technology	Wind	Solar
<b>Generation</b>		
Installed Capacity (kW)	1,000	250
Capacity Factor	27%	9%
Annual Generation (kWh)	2,366,820	197,235
<b>Energy Price Components</b>		
Feed-in Tariff Rate Early 2016* (£/kWh)	0.0546	0.0270
Reduced Feed-in Tariff Rate 2018 (£/kWh) (60% of 2016)	0.0328	0.0162
Onsite Energy Value (£/kWh)	0.0635	0.1320
Export Tariff (£/kWh)	0.0485	0.0485
<b>Capital Costs</b>		
Cost per kW (£)	£1,213	£1,021
Total Capital Cost (£)	£1,213,000	£255,250
Total Borrowing Costs (£) (20 year loan at 4% Interest)	£551,130	£115,974

<b>Benefits under different Scenarios (Net Cash After 20 Years + Simple Payback)</b>				
Scenario	Payback	Net Cash	Payback	Net Cash
Install Tomorrow: No energy used onsite, 2016 Feed-in Tariff	7.2 years	£3,116,253	Over 20 years	-£73,399
Further Digression: No energy used onsite, 2018 reduced Feed-in Tariff	9.2 years	£2,082,426	Over 20 years	-£116,002
Onsite Energy: 75% of energy used onsite, 2018 reduced Feed-in Tariff	8.1 years	£2,614,960	14.8 years	£131,035
Grant Funding: Capital costs 50% funded, no Feed-in Tariff	7.7 years	£1,413,750	19.4 years	£5,706
Grant Funding & Onsite Use: Capital costs 50% funded, 75% of energy used onsite, no Feed-in Tariff	6.1 years	£1,946,285	8.9 years	£170,397

\* Feed-in Tariff rates vary depending on installed capacity and technology. They are also likely to be reduced with time, a process known as depression. The Government's latest review of Feed-in Tariff rates is available online.

### **Government subsidy cuts**

In November 2015, the government announced drastic cuts to the Feed-in Tariff for wind and solar projects. Furthermore, the ability for groups to 'pre-accredit' (fixing themselves a subsidy rate in advance) has been removed. The exact situation going forwards is unclear; with some hope of mitigating the cuts due to promises of a special community rate of subsidy, and an ongoing legal challenge against the reductions. Nothing is likely to be certain until at least spring 2016, and RRAAF should monitor this area carefully; however for the time being it would be prudent to assume little or no government subsidy may be available.

RRAAF should consider compensating for the loss of the Feed-in Tariff through exploring some less conventional business cases. Some relevant case studies are included in the in the Resources Document which accompanies this Report, however the main options can be summarised:

- Lower capital costs by securing grant funding or low interest borrowing.
- Find a site where energy can be supplied locally or used onsite.
- Move to a different technology with higher subsidies.

### **Base business case**

The table opposite summarises the basic elements of a business case. The final section of the table shows projected total profit 'not cash' over the project lifetime and the time taken to 'payback' all installation costs.

Given current uncertainty over subsidies, and the new reduced rates, the final three scenarios are indicative of routes RRAAF could take to make a business case stack up with reduced or removed subsidies: through using energy locally and / or grant funding part of the costs of installation. These figures are only indicative, reflecting UK averages, and will vary greatly for any particular project. The Resources Document accompanying this Report includes further detail and links to the sources used for this table.

**“The function of art is to do more than tell it like it is - it’s to imagine what is possible.” bell hooks via Eileen Laurie**

**“Creating a sustaining fund for art activists through sustainable energy sources is a really interesting concept and I’m looking forward to watching it succeed.” Vicky Adams**

**“Love it! Much needed.” Katie Goodwin**

# Risks

The table below gives an outline of the current risks to the development of a community renewable energy project, outlining possible mitigation strategies.

Category	Description	Probability	Impact	Mitigating Measures
Economic	There is currently uncertainty about Feed-in Tariff rates for wind and solar generators, along with the ending of 'pre-accreditation' (allowing groups to fix a subsidy rate in advance). This means that significant changes to the revenue streams may occur during the development and construction phases.	Medium / High	High	RRAAF could / should attempt to build a business model independent from Feed-in Tariffs – this can be achieved by maximising revenue through onsite use, whilst funding through grants as far as possible. RRAAF could consider heat generation as an alternative, as RHI subsidies are still in place.
Economic	Ending of Social Investment Tax Relief (SITR) for community share offer reduces the financial attractiveness of share offers.	High	Medium	RRAAF should conduct significant market research in order to evaluate post SITR share offers in order to assess the impacts. This should be done prior to any RRAAF share offer. RRAAF should consider a loan / grant or community bond offer in place of a community share offer as a back-up option.
Regulatory	Attaining Planning Permission remains a significant risk when developing renewables.	Medium	High	RRAAF should conduct community outreach and support in order to minimise objections. Complete environmental impact and visual impact surveys early, and consult with any likely objectors (e.g. nearby airports, military).

Ellie Harrison + Naomi Siderfin as RRAAF assistants at Beaconsfield, London in October 2015





Category	Description	Probability	Impact	Mitigating Measures
Managerial	Attaining Land use permission remains a significant risk when developing renewables.	Medium	High	Developing a good relationship with the landowner(s) is key to mitigating risk. It is mandatory to sign legally binding agreement for both site and 'way-leaves' for access and any electrical cabling prior to investment of significant resource.
Technical	Attaining suitable and affordable Grid Connections remains a significant risk when developing renewables.	Medium	High	Look at the Scottish Power map showing constrained areas available online, and request export agreement early on, to guarantee the project capacity. If cost or delay for connection too high, consider reducing site export by designing project around onsite energy use. Community Energy Scotland have much experience in this area and can advise if such problems occur.
Managerial	Ensuring consistent project management throughout the project lifecycle.	Low	Medium	Once a viable project is identified RRAAF should appoint a project manager for the duration of the project.

**“This is an amazing idea bringing together two of my favourite subjects: the arts and the environment.” Lee McDonald**

**“Artists should not have to beg for funds to create their expression or have to fit into a box or pass a checklist. Art is about freedom and achieving this by using renewable energy is a wonderful idea - one that I am very happy to have contributed to!” Angela Quinn**

## Conclusions + Recommendations

At present there are many uncertainties regarding the community energy sector within Scotland, however many of us remember a time before the Feed-in Tariff when projects still proved viable based on their social and environmental returns. Therefore we do not feel the current uncertainty regarding the renewable energy sector is reason enough for RRAAF not to move forward with their project.

There is no doubt that the skill, stamina and enthusiasm of a not-for-profit distributing group taking forward an ambitious renewable energy project will be key in the eventual success of a project and should not be entered into lightly. However RRAAF have already run a successful crowdfunding campaign to fund this initial feasibility work, and now have a large network of individuals - the RRAAF Founders - based around the UK, as well as support from organisations with various expertise: Community Energy Scotland, New Economics Foundation, Artquest, Beaconsfield, CCA, 10:10, Platform and the Labofii, which should be built on over the coming months and called upon over the course of the project's development.

Initial discussions with Glasgow City Council have been encouraging, they have shared with us their renewable energy feasibility work looking at potential sites for development within the city and they are hopeful about working together with RRAAF to find a viable solution.

Funding to support the initial establishment of RRAAF and also carry out the initial scoping work to find a viable project site is likely to be available through CARES start-up funding and should be explored by an eligible partner organisation in conversation with Local Energy Scotland early in 2016.

**“Sometimes when applying for art funding, it can be confusing and murky trying to work out where the money really comes from. You can’t get cleaner than a wind turbine for artists to truly feel they can create whatever they wish, without risk of upsetting a logo.” Emma Crouch**

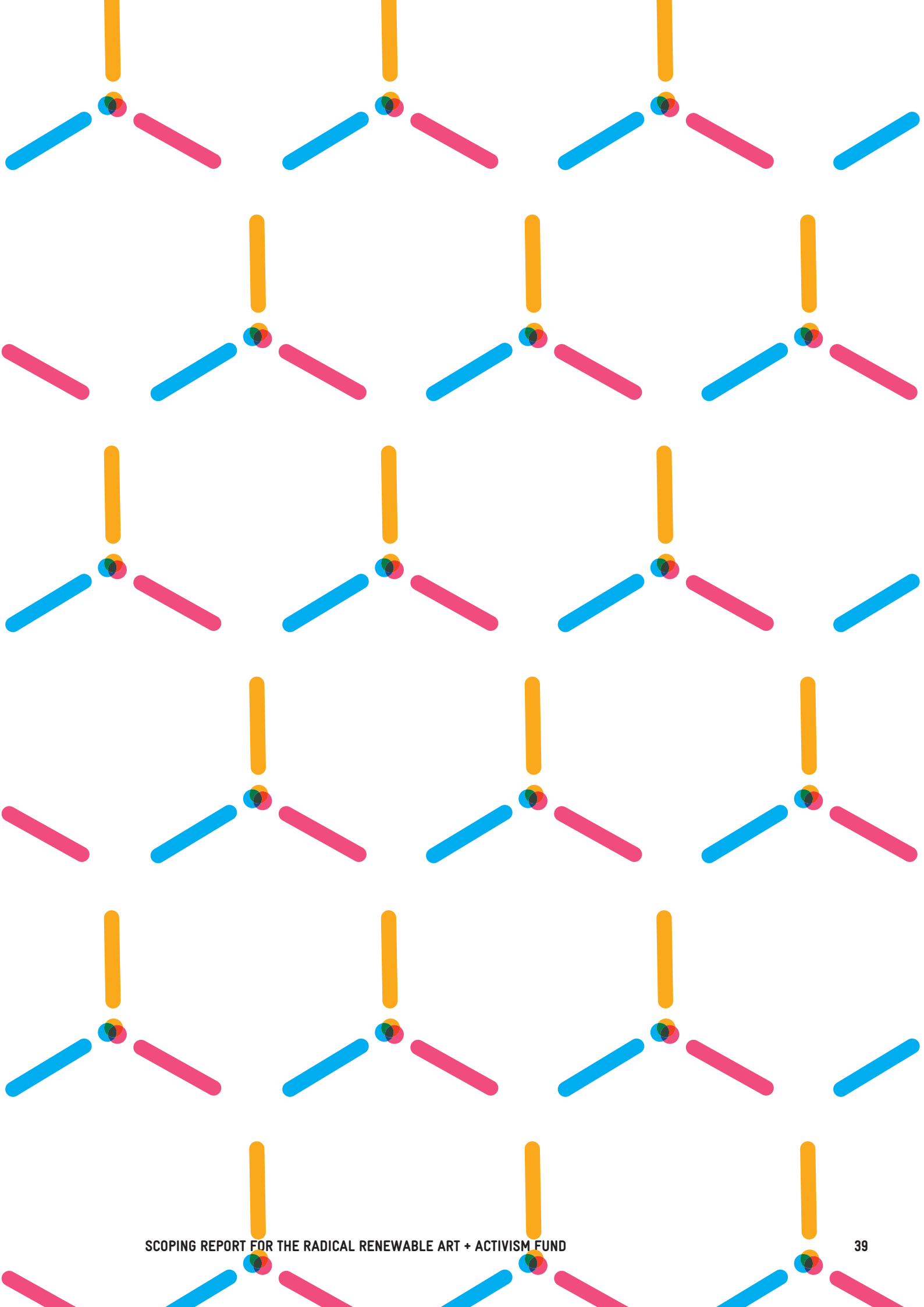
## Next Steps

A suggested route map for the months ahead are listed below, however it should be noted that many tasks can and should take place in parallel.

1. Find a partner eligible for CARES start-up funds who is willing to apply on RRAAF's behalf
2. Speak with Local Energy Scotland and develop a start-up funding proposal
3. Access CARES start-up funds
4. Plan the Founding Symposium and prepare proposals for the organisation's aims and objectives, project route maps and working groups, for discussion during the event
5. Hold RRAAF Founding Symposium
6. Form working groups for particular tasks, and appoint an interim board of directors
7. Formally constitute RRAAF as a legal entity
8. Decide whether to seek partner organisation(s) to co-develop the project. If so, begin discussions with partners
9. Find a number of suitable sites, and begin investigations

Ellie Harrison + Joe Smee as RRAAF assistants at CCA, Glasgow in December 2015







## **Opportunities for New Community Energy**

A Scoping Report for the  
Radical Renewable Art + Activism Fund

**Authors:** Anthony Browne, Benny Talbot,  
Nick Chapman + Georgy Davis  
Community Energy Scotland  
[www.communityenergyscotland.org.uk](http://www.communityenergyscotland.org.uk)

**Preface + Layout:** Ellie Harrison  
[www.ellieharrison.com](http://www.ellieharrison.com)

**Identity + Design:** Neil McGuire  
[www.afterthenews.co.uk](http://www.afterthenews.co.uk)

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## **Radical Renewable Art + Activism Fund**

[www.RRAAFund.org](http://www.RRAAFund.org)  
[info@RRAAFund.org](mailto:info@RRAAFund.org)

[www.twitter.com/RRAAFund](http://www.twitter.com/RRAAFund)  
[www.facebook.com/RRAAFund](http://www.facebook.com/RRAAFund)