

2016

Community R4C Ltd: Community share offer

A community-led, sustainable enterprise to provide economic, social and environmental benefits for Gloucestershire by treating our waste as a valuable resource.



Community | **Resource Recovery
Recycling and
Refining Centre**



Trash to Treasure

Dear friends

Rubbish may not be the most fun topic but it's a very important one that concerns all of us. And it's costly too. Right now we treat it like trash and pay to have it collected, then we pay to have half of it, the 'black bag' waste, buried or burned. But to us at Community R4C our black bag waste not just trash, it's potential *treasure*. We want to put this treasure to use for the people of Gloucestershire - and over time, we want to transform the very way we think about waste. We want to reduce waste in the first place and then make good use of what's thrown away.

Our immediate problem is that approval has been given for a huge incinerator which will commit the County to wasteful mass incineration for the next 30 years at an estimated cost of £600 million.

We want to challenge that by supporting the creation of a new recycling plant which will operate as an independent commercial venture and mean there is no need for incineration in the County.

This plant will use the latest and most advanced MBHT recycling technology to ensure that our waste is put to valuable use, diverting it from both landfill **and** mass-burn incineration and recycling / recovering over 90%. Local businesses will benefit from high quality low cost recyclates like metals and plastics and from biomass fuel pellets. When the plant is operational it pays Community R4C, up to £250,000 a year to provide a community chest to support research, education, industry and community initiatives which further reduce our waste and stimulate local use of the resources we extract, thus providing economic, social and environmental benefits.

This is a scalable model, and a ground-breaking one. By putting the community in the driving seat, "community defines, commercially delivered", it is a direct reversal of the corporate tender model, which dominates the waste sector and many other sectors in public life.

We are asking you to join us in helping provide the funds which will galvanise the whole process, enabling the professional communications, administration and publicity the project requires and enabling us to support local enterprises and community initiatives that will deliver a thriving local circular economy. You can do this by becoming a shareholder in Community R4C, which has been set up as a Community Benefit Society, registered with the Financial Conduct Authority. Our aims are to preserve the environment, educate on waste and stimulate a local circular resource economy.

We warmly invite you to join us in this exciting venture.



Sue Oppenheimer



Jon Scott

Community R4C Ltd Co-chairs

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IMPORTANT NOTICE

The purpose of the Document is to provide initial information to interested parties upon which they may base a decision as to whether to pursue investment in Community R4C Ltd. Community R4C Ltd is a community benefit society registered by the FCA under the Co-operative and Community Benefit Societies Act 2014, registration number 7282. The Document is not all-inclusive nor does it contain all the information that a prospective investor may desire, further information is available on request or from our website, www.communityr4c.com

This offer is not covered by the Financial Services Compensation Scheme and investors have no recourse to an ombudsman. You should only ever invest as much as you are prepared to lose.

For further information please contact: Jon Scott, Community R4C Ltd. Email: jon@communityr4c.com

1. Executive Summary

Community R4C Ltd (CR4C) is a community-owned sustainable enterprise with a commitment to delivering long term economic, social and environmental benefits through responsible waste management in Gloucestershire. It will deliver these benefits through working with local businesses and communities that will prevent, reduce, reuse and recycle material which would otherwise be thrown away and wasted - thus destroying our valuable resources and doing great harm to the environment through global warming gasses and toxic emissions.

Community defined, commercially delivered

This is a 'community defined, commercially delivered' model which will be an exemplar of the way socially engaged, environmentally sustainable business can work for all.

Our first project is working with our customer, Revolution R4C. Its recycling plant which will add to doorstep recycling and waste prevention by recovering and putting to valuable use over 90% of the material resources in black bin bags. The plant, once operational, will benefit from the thriving local circular economy we have created and the support we can continue to give, in return it will pay Community R4C from its profits, providing Community R4C a 'community chest' for use on other circular economy projects. Over the recycling plant's projected lifetime of 20 years as much as £5 million will be generated in this way.

Future Community R4C projects will focus on issues such as:

- waste reduction, reuse, repair and upcycling – that is turning waste products into high quality new items.
- work to improve the quality of recyclates, from the plant and from doorstep recycling
- local use of the recyclates as a sustainable low cost resource to stimulate local industry, at both a cottage industry and larger scale
- education, research and training

We intend to provide support to projects in their early stages, or at times of great change. This support can be in the form of expertise, pilot scale equipment, marketing support, team building / recruitment, technical advice, business advice, education/training, loan of equipment / offices etc

Any support given by Community R4C to a customer organisation will be matched by a commitment from that organisation to deliver social, environmental and (where feasible) economic returns.

The R4C Recycling Plant

Our customer, the R4C Recycling Plant, for example, will not only deliver substantial environmental benefits and sustainable, high quality employment, but will also deliver economic benefits through providing low cost resources to local industry so improving the competitiveness of local companies. In addition a generous share of profits from the first line of the plant's operations – up to 25% - will be paid to Community R4C in return for the work we have done and the continued support of the local circular economy we have created. This income will ensure our long term financial security and allow us to continue to support other circular economy projects.

The R4C Recycling Plant sits at the centre of our vision for an effective local circular economy. For these reasons, the successful build of this project is critical to delivering the community and shareholder benefits to which we are committed.

It is important to note that the plant will be owned and operated by a commercial organisation (Revolution R4C Ltd). Revolution R4C is responsible for raising all of the capital funds (for equipment, working capital etc) required to fund the plant itself. However, there are activities which Community R4C can assist with, including professional communications, administration and publicity to help us secure greater community engagement, approvals etc.

By delivering a local integrated circular economy, with the R4C Recycling Plant at its core there will be no need for incineration in the County - indeed any incinerator would not be able to compete on costs and would soon become unviable. The savings to local citizens can be put to much better use, while the plant will deliver enormous environmental benefit: a saving of ½ tonne per year of CO₂ for every tonne of waste processed; much reduced harmful emissions; and protection of our local environment and resource for generations to come.

2. What is Community R4C?

Community R4C is a Community Benefit Society registered in 2016. Our purpose is:

The protection and preservation of the environment for the public benefit by:

(a) the promotion of waste reduction, re-use, reclamation, recycling, use of recycled products and the use of surplus material

(b) advancing the education of the public about all aspects of waste generation, waste management, waste recycling and the resource circular economy

(c) the promotion of such other activities and initiatives that contribute to and stimulate the development of a local resource circular economy.

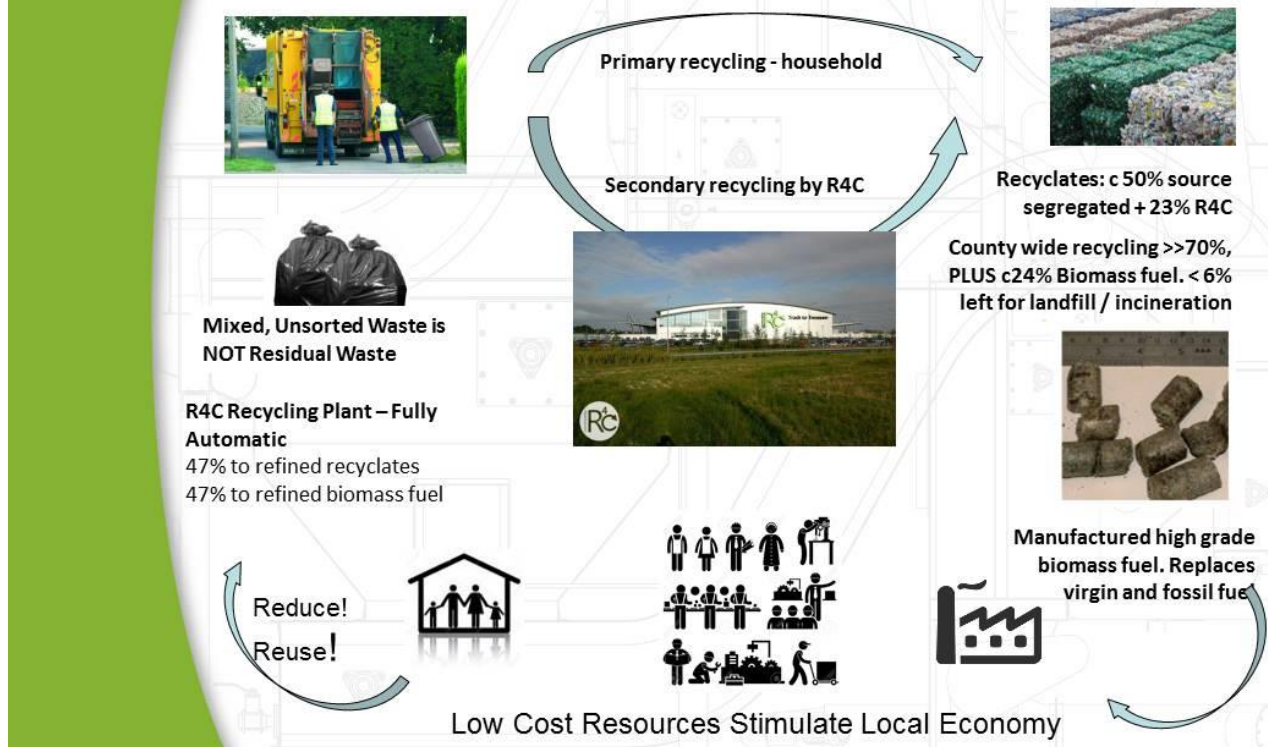
Central to our vision for the sustainable use of resources in Gloucestershire is a belief that we must not incinerate black bag waste which simply results in the expensive and harmful destruction of resource. Instead we will establish a flexible approach to minimizing waste, and extracting all valuable material from waste. Over 90% of the material in a typical black bin bag can be put to useful use. Community R4C will ensure that the R4C Recycling Plant is built in Gloucestershire to take all local household black bag waste, so that no resources are lost, and there is no need for harmful incineration.

Community R4C will not provide support for capital projects, such as plant and equipment. Specifically capital expenditure for the R4C Recycling Plant will be raised by that business, however we will provide pre-funding non-cash support to this project and others. Community R4C will undertake activities such as:

- Establishment costs of new enterprises committed to the circular economy
- Education and promotion.
- Recruitment for new enterprises, and secondment in early stages.
- Partnership identification and building
- Encouraging business to use recycled resources locally.
- Research and pilot projects for the use of recyclates locally
- Support (not capital) to encourage conversion of fossil fuel using businesses to convert to renewable biomass from the R4C plant

A Sustainable Vision For Gloucestershire

Resources not Waste



Once the plant is up and running and generating revenues, we will receive income in lieu of the work we have provided to them. The future income from successful projects such as the Plant and others will enable CR4C to broaden its actions in pursuit of its objects. We plan to engage the community in co-creating this future vision. We will bring supporters together to develop ideas for action research projects, community-led education projects and ways to encourage the development of a local circular economy. For instance, we may choose to support a network of volunteer recycling champions; we may support action research with local businesses to help them reduce packaging and waste.

3. The Immediate Problem

In Gloucestershire, even after household recycling, 146,000 tonnes of household black bag waste goes to landfill sites which are already nearly full. Recycling rates are actually dropping at present.

The County Council's planned solution is to build a huge "mass-burn" incinerator into which everything in our black bags will be thrown with no sorting or pre-treatment, costing the taxpayer an estimated £600 million over 30 years, creating greenhouse gases and risk of widespread pollution, and destroying valuable materials forever. With regulations heading towards recycling, recovery and climate protection, this wasteful project may soon be heavily taxed and/or unusable.

The independent recycling plant supported by Community R4C will provide a much superior solution. It will handle all of the county's waste and recycle / recover over 90% of it by sorting recyclates for use as raw materials, and by creating sustainable fuel in the form of high quality biomass pellets. There is a short video on our website which explains how this is done. www.communityr4c.com.

Here is a summary of the advantages of the R4C sorting and recycling plant over an incinerator like the one planned in Gloucestershire:

COMPARISON:	INCINERATOR	R4C TECHNOLOGY
Plant Height	70 metres	15 metres
Build Cost	£150 million	£15 million
Build Time	3 years	18 months
Cost per tonne	£100	as low as £20
CO ₂ e Emissions	Creates 26,000 tonnes/year	Removes 106,000 tonnes/year

4. The R4C Recycling Plant

Our first priority for our activity will be working with Revolution R4C Ltd. They plan to build a waste processing facility, the "R4C Recycling Plant"¹ in Gloucestershire to be operational by Q3 2018. The plant will generate local employment, support major local industry and offer a net financial benefit to partner Council's through increased recycling credits and the opportunity to simplify waste collection.

The plant uses an advanced form of waste treatment which has been independently assessed as outperforming all comparable processes available at a commercial scale in the UK². For example, the plant will increase the recycling levels achieved in the County by at least 50% - in the case of one Gloucestershire District, Stroud for example from an estimated 42% to 64% and beyond³. It will offer substantial net benefits to the county's "Carbon Footprint", offering a net reduction in CO₂ equivalent of over ½ tonne for every tonne of waste processed. Each of the Councils that work with us will show significant savings, for example Stroud District Council (SDC) will see a contribution of at least 14,500⁴ tonnes pa CO₂ reduction.

The R4C Recycling Plant is viable based on an assumption of £50 pt (per tonne) for commercial and industrial (C&I) waste, and £20 pt for municipal solid waste (MSW). These prices are significantly below the market price for residual waste (typically in excess of £80 pt, and believed to be c£110 pt currently for landfill) which will ensure that there is ample waste and associated income available to the plant. The lower price, available to Councils and community groups for household waste is designed to be less than the "recycling" rebate they will receive for each tonne of waste recycled from the waste disposal authority (GCC) and therefore will not create additional costs. This lower price is effectively subsidised through the benefits of a free community use operating licence for the technology, operational advantages and the higher priced C&I waste streams.

¹ Community R4C is being invited to rename the plant to reflect the local community and our aspirations, this will occur shortly

² SLR, Tony Yates 2009

³ See "Stroud Waste Assumptions" section below

⁴ Based on 560 kg per tonne waste processed, as per SLR WRATE assessment. 26,000 tpa residual waste SDC 2014/15

Revolution R4C is in discussions with waste supply and property development businesses, which will provide a suitable site, building (on a leasehold basis) and waste supply. In addition Revolution R4C is in discussion with a range of funders for the capital costs of the £15M plant. Revolution R4C has a low overhead cost base and can offer the lowest capital and operational costs of any comparable plant⁵. This allows the plant to offer the lowest waste gate fees on the market, while delivering exceptional recycling, CO2 and environmental performance.

The biomass fuel produced by the R4C Recycling Plant will be made available to local industry at low cost. It is a sustainable, 90% biomass product with excellent burning characteristics, low in contaminants and comparable to virgin wood pellets, which currently sell for well in excess of £100 pt. The fuel is effectively manufactured for £0 pt, and will be offered to local industry at a fraction of the cost of alternative fuels, so offering substantial costs savings and environmental benefits to local users. The group is establishing relationships with partners to fund and install suitable biomass boilers at local businesses, particularly those that require large amounts of heat such as industrial dairy plants, giving long term cost savings and replacing fossil fuels. This type of initiative will enhance employment and secure industry in the area, while delivering substantial environmental benefit.

Revolution R4C's gate fee compares very favourably to the estimated gate fee for the planned incinerator of £100 pt (indexed) and landfill costs, offering a saving of around £80 pt. If adopted across the County local residents would see long term savings in excess of £10M per annum, which would be available to the County Council to spend on other services.

Revolution R4C is a customer of our services. Under the terms of the contract we have with them we will receive fees (some deferred until they are able to pay) and ongoing income from them, these fees are payable as Revolution R4C becomes funded and operational. The fees paid are related to the plants ability to pay and capped at £250,000 a year and can be a substantial proportion of the gross profits of the plant. The plant benefits from the work we do for them, and pays us for the work we have done historically, and the ongoing support they receive through the thriving circular economy we have created.

In addition the low gate fee for household waste means that that it is everyone's interests to promote waste reduction, the plant can achieve profitability from commercial and industrial waste alone.

5. The Community R4C Timetable

WHEN	WHAT
July 2015	Community R4C formed, website established. Key partnerships established
Jan / Feb 2016	Community Benefit Society established, Founder Directors appointed
April - May 2016	Community Share Offer
Summer 2016	CR4C to initiate projects and employ first staff to help realise vision.
Sep 2016 – Sep 2018 (approx)	R4C Recycling Plant secures own funding to build plant. Contract, procurement and permissions, 15 months construction + commissioning
August 2017	First AGM
2019/20	Income stream commences from RR4C into CR4C

⁵ Detailed data and independent third party reference for this claim is available on request

6. Start up and Five Year Budget

Community R4C has a low overhead base and will support projects which will develop the circular resource economy in Gloucestershire. Some of these project will have an educational bias, however the majority will be seed and support activities with related community and other businesses. These businesses will be required to repay historical costs once they are profitable or/and funded, and will in general also be required to pay Community R4C for services provided when they are profitable. These projected costs and incomes are modelled below.

We have set an initial projected capital raise of £50,000 with an expectation that this will rise to £150,000 by early 2017; this may come from this first share offer, or may be from subsequent offers the Directors may propose.

Community R4C Ltd - Five Year Plan

Figures in £	2016				2016	2017				2017	2018				2018	2019				2019	2020				2020
	Q1	Q2	Q3	Q4	year	Q1	Q2	Q3	Q4	year	Q1	Q2	Q3	Q4	year	Q1	Q2	Q3	Q4	year	Q1	Q2	Q3	Q4	year
Indicative Milestones	CBS Established	Formal Share Offer	RRAC Plant funded	First Reduce and Recycle use Projects		Employ Executive Director		Growing projects pipeline			R4C Plant Operational					"End of Waste" for Biomass Fuel	SEIS qualification Period Complete				CRAC Producing Healthy Surplus	Ongoing investment projects and education			
Income																									
Donation		1,000			1,000					0					0					0					0
Subscription		1,000	50,000		51,000		100,000			100,000					0					0					0
Income: R4C Recycling project				25,000	25,000					0			15,000	25,000	40,000	25,000	25,000	25,000	40,000	115,000	40,000	40,000	40,000	50,000	170,000
Income: Other projects					0					0					0	10,000		10,000	10,000	30,000	10,000	10,000	20,000	10,000	50,000
Misc and Grant				5,000	5,000		10,000			10,000		20,000			20,000		20,000		20,000	20,000		25,000			25,000
Less Subscription Withdrawals					0					0					0			-20,000		-20,000	-40,000		-20,000		-60,000
Income Total		2,000	50,000	5,000	82,000		110,000	0	0	110,000		0	20,000	15,000	60,000	35,000	45,000	15,000	50,000	145,000	10,000	75,000	40,000	60,000	185,000
Expenditure - Overhead																									
Staff	600	3,500	3,500	3,500	11,100	6,000	6,000	6,000	6,000	24,000	6,500	6,500	6,500	6,500	26,000	7,000	7,000	7,000	7,000	28,000	7,000	7,000	7,000	7,000	28,000
Admin Overheads	200	300	300	300	1,100	400	400	400	500	1,800	600	600	600	600	2,400	700	700	700	700	2,800	700	700	700	700	2,800
Legal / accounting	500	3,000	500	2,000	6,000	500	500	500	2,000	3,500	500	500	500	10,000	11,500	500	2,000	500	10,000	13,000	500	2,000	500	10,000	13,000
PR and Communications		3,000	3,000	3,000	9,000	3,000	3,000	3,000	3,000	12,000	3,500	3,500	3,500	3,500	14,000	3,500	3,500	3,500	3,500	14,000	3,500	3,500	3,500	3,500	14,000
Education / Resources		500	500	500	1,500	1,000	1,000	5,000	1,000	8,000	1,500	1,500	1,500	1,500	6,000	1,500	1,500	1,500	5,000	9,500	1,500	1,500	1,500	5,000	9,500
Events		2,000			2,000	1,000	1,000	1,000	1,000	4,000	2,000	2,000	2,000	2,000	8,000	2,000	2,000	2,500	2,500	9,000	2,500	2,000	2,500	2,500	9,500
Overhead Total	1,300	12,300	7,800	9,300	30,700	11,900	11,900	16,000	13,500	53,300	14,600	14,600	14,600	24,100	67,900	15,200	16,700	15,700	28,700	76,300	15,700	16,700	15,700	28,700	76,800
Expenditure - Projects																									
Revolution R4C Plant			10,000	15,000	25,000					0					0					0					0
Reduce Projects				2,000	2,000			5,000		5,000			5,000		5,000			10,000		10,000			10,000		10,000
Reuse projects					0	5,000				5,000	5,000				5,000	10,000				10,000	10,000		15,000		25,000
Use of Recycle projects				10,000	10,000			5,000		5,000		10,000			10,000		20,000			20,000		20,000			40,000
Use of Biomass Fuel Projects					0			5,000	10,000	15,000			5,000	5,000	10,000			5,000	10,000	15,000	5,000		5,000	10,000	20,000
Project Total	0	10,000	15,000	12,000	37,000	5,000	5,000	10,000	10,000	30,000	5,000	10,000	10,000	5,000	30,000	10,000	20,000	15,000	10,000	55,000	15,000	20,000	30,000	30,000	95,000
Expenditure Total	1,300	22,300	22,800	21,300	67,700	16,900	16,900	26,000	23,500	83,300	19,600	24,600	24,600	29,100	97,900	25,200	36,700	30,700	38,700	131,300	30,700	36,700	45,700	58,700	171,800
Surplus / Reserve																									
quarterly	700	27,700	-17,800	3,700	14,300	93,100	-16,900	-26,000	-23,500	26,700	-19,600	-4,600	-9,600	-4,100	-37,900	9,800	8,300	-15,700	11,300	13,700	-20,700	38,300	-5,700	1,300	13,200
cummulative	700	28,400	10,600	14,300	14,300	107,400	90,500	64,500	41,000	41,000	21,400	16,800	7,200	3,100	3,100	12,900	21,200	5,500	16,800	16,800	-3,900	34,400	28,700	30,000	30,000

7. Relationship between Community R4C and Revolution R4C Ltd

Community R4C is a community benefit society owned by its members. It defines, empowers and supports local circular economy enterprise, including the R4C recycling plant.

Revolution R4C (RR4C) is one of the businesses that we will work with. The relationship is governed by a commercial contract in which we provide services and they pay us when they are able to do so. RR4C is a commercial organisation which been established to fund, build, own and operate the R4C recycling plant, and it will do this in a way that delivers long term and lasting benefit to the environment and local taxpayers. It will operate commercially, and once profitable can pay fees to Community R4C (potentially £5M over 20 years) which can repay investors and continue to support the work of CR4C.

This is our vision for a ‘community defined, commercially delivered’ model for sustainable business that can deliver long term benefits to our community – no incineration, we turn trash to treasure.

So Revolution R4C is a customer of services provided by CR4C, and of the value of the vibrant circular economy in Gloucestershire that CR4C will create. The contract between the businesses commits that:

CR4C will work jointly to support the development of the RR4C plant through publicity, gaining community support and through providing staffing support for R4C’s efforts at raising its start-up funds and providing direct support for activities such as establishing a website and necessary professional fees. It will have the right to appoint a Director to the RR4C Board. CR4C’s Directors aim to use no more than 50% of its funds to support activities directly related to the R4C Recycling Plant, the balance being used to support other projects linked to its aims.

RR4C will refund all CR4C costs once the plant is funded (target later in 2016) and pay CR4C fees for ongoing services and historical work from profits once fully established. These fees can be as much as 25% of net profit, capped at £250,000 pa, for a period of 20 years, or the life of the plant. RR4C will process up to 130,000 of Gloucestershire household waste at a cost of £20 pt (indexed) (saving potentially £10M County-wide) for councils who commit by the time the plant is funded, offering significant savings, safeguarding resources and our environment. In addition the recyclates and biomass fuel will be offered to local businesses, including those identified by Community R4C, at discount prices, offering cost savings to local businesses and building a local sustainable, circular economy.

The contract provides for certain safeguards to the community, and oversight and information rights, but no controlling interest to Community R4C⁶.

The CR4C business plan allows for £25,000 to fund services to support the establishment of the R4C recycling plant. In return we get the benefits from the contract detailed above and a viable alternative to incineration which delivers long term benefits in the County. Community R4C expects to see a long term income from this project of up to £250,000 per annum, which will be used to support the aims of CR4C and any shareholder withdrawal of investment.

⁶ No Directors with involvement in RR4C’s governance vote on the contract between CR4C and RR4C, which the other Directors of CR4C believe to be on excellent and favourable terms to CR4C.

The Board of Community R4C believes this is an exceptional return to the community – economic, environmental and social - for a fairly modest level of financial support.

8. Organisation and Management

Community R4C has a wide local community team and a large support network. We are committed to delivering long term social, local business and environmental benefit from R4C at the heart of a circular economy in Gloucestershire.



The Founder Board of Community R4C Ltd includes:

Sue Oppenheimer: Chair Standish Parish Council, Glosvain campaigner and community involvement specialist. MSc in Environmental Policy and Management and experienced Plc Director

Jon Scott: Physicist, teacher, school governor and education technology specialist. Passionate about sustainable development and the need for clear communication of scientific and technical ideas.

Tom Jarman: Selsley resident, engineer, entrepreneur and sustainable business champion in the waste-to-resources industry. Extensive funding and business building experience including a major role in the world record crowd funding for HAB Housing Limited.

In addition there is an advisory and support group which makes up a steering group, members of this can be found on the Company's website, www.communityr4c.com

It is intended to appoint further Board members who may be identified during the fund raise, members are encouraged to come forward and become part of the team at Board or operational level. The Company intends to recruit a part or full time executive Director when funds allow, and the Board has identified a number of suitable candidates.

The Board have a policy of remunerating directors for service as Directors at a rate of £200 per day. However, in the absence of revenues, the current Directors have worked unpaid, and fees unpaid have accrued to them as debts from the society which will be capitalised in this offer. In addition, the current Board have provided services to CR4C in lieu of its creation and development, and these sums to date will be converted into equity alongside Director's fees.

The Board has a conflict of interest policy to ensure that any payments to Directors are fair, reasonable and represent best value to the society.

All fees due in the future will only be paid in the event of there being sufficient revenues to be able to do so in respect of the responsibilities to discharge community benefit and honour aspirations for share withdrawal and interest payments; until then, Directors fees will continue to be capitalised and so will remain unpaid.

The executive Director will be a paid position.

9. Investing in CR4C – Community Shares and Risks

Community R4C is a community benefit society registered with the FCA, the Financial Conduct Authority.

A community benefit society is run primarily for the benefit of the community at large, rather than just for its members. This means that it must have an overarching community purpose that reaches beyond its membership. Although a community benefit society has the power to pay interest on members' share capital, it cannot distribute surpluses to members in the form of dividends. Each shareholder has one vote, regardless of the number of shares they hold. This ensures the society is democratic.

Your investment in Community R4C supports the aims of the business, for example the short term objectives of stimulating a local circular economy by providing a viable alternative to incineration for the treatment of Gloucestershire waste. You are investing in a triple bottom line⁷ business which delivers benefits to the wider community, including non-members.

The Company is offering subscription in the form of withdrawable shares, called 'Community Shares'. The minimum individual subscription is £100. These community shares have special rules that apply to them and some background is given below. Potential investors who require more information are advised to consult with a financial adviser as they feel appropriate.

This type of share capital cannot be transferred between individuals (apart from as inheritance upon death). Instead, the society allows shareholders to withdraw their share capital, subject to conditions that protect the society's financial security. This means that an investor can have the money they have invested returned to them, but this is dependent on the Directors being satisfied that the society is able to afford that in light of its overall financial position and future needs.

Shareholders have a share account, and can increase or decrease their shareholding, have interest paid on it by the society if trading performance allows, or close the account altogether by withdrawing all their share capital, if trading performance allows. The value of shares is fixed and not subject to speculation, however Community R4C has the power to reduce the value of shares in the event of a devaluation of the society by our auditors.

In practice all of the funds invested will be used to support the establishing of circular economy business in the county before these business will be in a position to generate income for the Society, so the value of shares is likely to reduce to close to zero before recovering.

⁷ A business that delivers social/community returns and environmental benefits in addition to financial returns

10. Investor Benefits: Membership, SEIS Tax Relief and Investment Returns

As a member of the Society you will have an equal vote in general meetings of the Society, including those to appoint Directors. You will be supporting a Society committed to delivering community and environmental benefits, linked to delivering a circular economy use of resources without incineration.

The Directors will set an interest policy each year, and should they believe it prudent to do so, they will allow withdrawal by application on six months' notice.

We plan to offer a maximum interest rate on members capital of 6% pa beginning from year 4 onwards; before the 4th year, no interest will be paid or accrued, and from year 4 onwards, the actual amount declared by the Directors will be dependent on the society's financial performance.

The society's ability to support withdrawal will be dependent on receiving income from the projects it has supported and so the Directors do not propose to allow withdrawal for the first three years as the underlying assets of the Society will reduce to close to zero over the first two years of operation.

We recommend that you consider your investment to be locked in for at least three years, and that this is a risk investment dependent on future trading performance. In particular, as the first (and likeliest) project to be able to return funds to CR4C, failure to build the R4C Recycling Plant is a significant risk, and so the Directors consider that you should only invest what you can afford to lose in supporting the aims of Community R4C

The society has applied for confirmation from HMRC that investments made in this share offer would be eligible for tax relief of 50%, via the Seed Enterprise Investment Scheme (there is some very good information on SEIS tax relief on the Crowdcube website which can be found at <https://www.crowdcube.com/pg/seis-tax-relief-42>).

Assuming the investment is eligible for tax relief, were the society to enable withdrawal after three years, investors would be in effect doubling their investment value. For example, investing £500 would see £250 returned in tax relief. As a result, £500 is withdrawn on the basis of £250 cash investment.

Please note however that while we have applied to HMRC for SEIS pre-approval, at the time of the offer launching, we have not had this confirmed. In any case tax benefits are not something the Society can guarantee. Anyone investing on the basis of the potential tax break should check with their own financial advisor as to their eligibility and the means by which they will claim it.

We would recommend that members of the community only invest what they feel they are happy to give to support the establishment, operations and goals of Community R4C.

Appendices

11. Gloucestershire Waste Treatment and the R4C Recycling Plant

a. Gloucestershire Waste Overview

Gloucestershire is a two tier waste authority with District Councils such as Stroud District Council being waste collection authorities (WCA) and Gloucestershire County Council being the waste disposal authority (WDA). Both are subject to the obligations of waste directives such as the waste regulations 2011 which emphasise the need to drive waste up the waste hierarchy and achieve best environmental outcome. R4C will work with WCA's (and the WDA if it is willing) to process waste prior to disposal or incineration by the WDA, to increase recycling by at least 50%, improve the efficiency of energy recovery by at least four fold and greatly enhance the carbon footprint and resource maintenance as part of an evolving and sustainable circular economy.

Gloucestershire's WCAs handle c300,000 tonnes of municipal solid waste (MSW) each year, approximately 47% is recycled (with a 70% target) leaving in excess of 120,000 tonnes of residual waste destined for landfill or incineration. Commercial and Industrial (C&I) waste in the district represents more than 375,000 tonnes pa and has similar recycling requirements. Locally, Stroud District Council collects around 25,000 tonnes pa of non-separated household waste, primarily ending up in landfill.

The R4C plant will treat unsorted waste (typically called residual waste, however it is known to be full of recyclates and other high value material) using a 'best in class' process, a form of advanced MBHT provided under licence from Biocentre Technology Ltd. Further details of the process and its history are available on request and can be found on the website www.biocentre.co and on our own site.

The plant will be built in a standard large industrial unit of 120,000 sqft <15m eaves, provided on a fully serviced basis on a long term lease by development partner who may also have waste interest. The plant conforms to the requirements of B2 (industrial, manufacturing) planning consent and does not require sui generis approval⁸. A number of suitable partners and sites have been identified located centrally in this region, most in the Stroud Planning area.



Target Catchment Area

R4C is 'Right size' and scalable to meet the local community needs. The facility will be commissioned with a capacity of c130,000 tonnes pa to serve Gloucestershire, with scope to double capacity in the future. The business plan is profitable on the basis of a MSW gate fee of £20 per tonne with C&I priced at £50 per tonne. Given the current land fill gate fee including taxes at between £90–120 per tonne and Energy from Waste plants at £65-100 per tonne, it makes an unbeatable proposition.

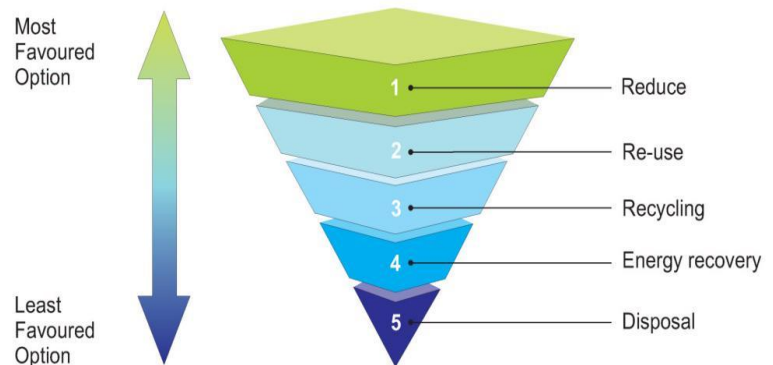
⁸ Biocentre have QC opinion and three legal precedents for this

b. Waste Hierarchy, Recycling and Carbon Footprint Benefits

All District Councils are committed to best environmental outcome and improvements measured against the waste hierarchy.

Sustainability principles embrace a flexible approach that encourages constant improvement and R4C offers the combined benefits of:

- Immediate substantial movement up the waste hierarchy, in particular recycling rates and a 4X improvement on incineration in the efficiency of recovery
- Independently assessed major benefits in reducing “Global Warming Potential” (Carbon footprint) and major improvements in resource recovery, in particular related to high value recyclates
- A flexible and supportive approach and infrastructure that can continue to improve and help drive ever better outcomes – and economic incentives to match.



Recycling Benefit:

We have taken a specific example to show the benefits of treating waste in this way – Stroud District Council, SDC

An analysis of Stroud projected waste collection shows that 30% of all ‘residual waste’ sent to the R4C Recycling Plant will be recovered as dry recyclate (plastic, glass, metals)⁹. This alone would push Stroud’s recycling rate up substantially, with no change in collection methodology. We estimate that Stroud’s recycling rate would increase by over 50% from 42%¹⁰ to 64%¹¹

In addition water will be recovered (around 10%) and a peat like biomass is produced (14%). Both of these materials are put to use in place of virgin product, and may be considered recycling.

The process also produces a high grade biomass fuel product. This has been proven to replace coal or wood pellets with c80% of energy recovered (compared to just over 20% for the planned Gloucestershire incinerator) and 90% of all energy coming from renewable biogenic sources (c37% biogenic in the Gloucestershire incinerator case).

Another way of considering this is that all but 6% waste collected by councils will be put to useful use, clearly this is moving waste substantially up the waste hierarchy and contributing substantially to the Councils aims in this area. These improvements will be achieved with no assumed changes in collection methodologies or householder behaviour.

Carbon Footprint (Global Warming Potential) – Improved Recovery

⁹ See section on Stroud Waste assumptions below

¹⁰ This figure is to be confirmed from Stroud projected residual and recycling figures based on the new collection regime. A higher base figure here will increase the 64% figure also

¹¹ See section on Stroud Waste assumptions

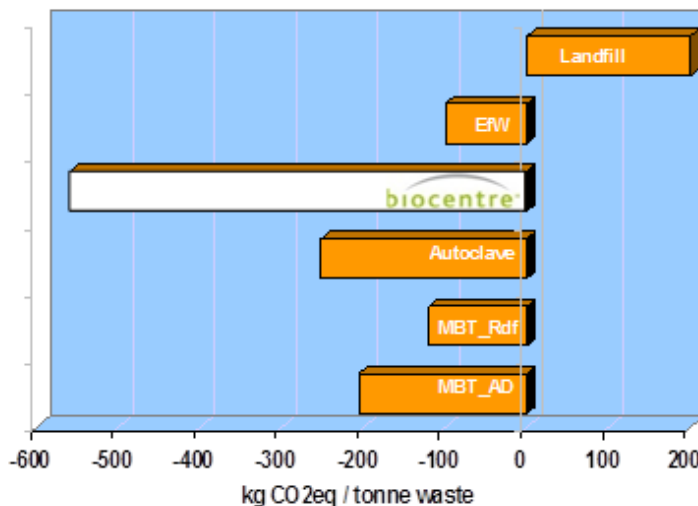
For waste material that is not economically recyclable it is legitimate to seek to recover energy, however it is important to still pursue the best environmental outcome. The fuel produced by the R4C plant is a high quality, high biomass fuel which can be used in combustion or other conversion processes where the power is needed. It provides a very efficient source of renewable power for large heat users such as milk processors to be used in place of fossil fuels.

The fuel is pelletised and can easily be transported to where it is needed, unlike the waste heat of an incinerator. All of the plastic and much of the moisture has been removed from this fuel resulting in much more efficient conversion without the use of plastic, a fossil fuel. The fuel has also had much of the chlorine and heavy metal content removed, resulting in a much cleaner burn.¹²

This enhanced recovery delivers a significant reduction in the production of harmful gasses and toxic bottom ash, and a significant improvement in energy efficiency and Carbon Footprint. This can be measured using DEFRA's WRATE tool which calculates the Global Warming Potential (Carbon Footprint) and resource depletion of waste treatment. The Biocentre process has been independently assessed by SLR consulting in Bristol. Their full WRATE assessment is available on request – in summary for every 1 tonne of waste processed in this way a net 570 kg of CO₂ equivalent will be removed from the atmosphere (through displacing more harmful energy use). This benefit greatly increases if the fuel is used for direct replacement of a fossil fuel, and if it replaces coal the benefit is around 1.5 tonnes CO₂ removed for every 1 tonne waste.¹³

Compared to the recovery that will be achieved at the planned Gloucestershire incinerator:

- 90% of net energy recovered from biogenic sources (renewable biomass). The incinerator is around 37% due to the high plastic content and the need to burn off water in organic material
- Up to 80% of the energy available in biogenic waste is recovered – the incinerator achieves just over 20%
- Carbon footprint of 570 kg CO₂ net removal from the atmosphere per tonne waste processed (incinerator is a net emitter of around 200 kg CO₂ per tonne waste)
- Clearly this is a substantially better environmental outcome so conforms to the principles of the waste hierarchy and the waste regulations 2011.



Carbon / CO₂ comparison of waste treatment technologies using the WRATE tool. Note the EfW plant reported here is an efficient plant that uses the waste heat, CHP.

c. Advanced MBHT Biocentre Process Technology

¹² See white paper "evolution of the MBHT process, why a high quality fuel is important" available on the Community R4C website

¹³ Summary report Biocentre, Environmental benefits available on the Community R4C website. Full report available on request

Revolution R4C have selected the Biocentre advanced MBHT process for its plant because:

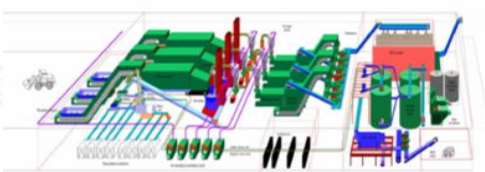
- The technology is fully proven and low risk, using standard equipment in a proprietary configuration which has been proven over series of UK plants. This is corroborated by independent third party due diligence.¹⁴
- It offers lowest capex (capital expenditure) and opex (operational expenditure)
- The plant can be simply installed in a standard B2 industrial unit
- R4C have negotiated a free community operating licence which further reduces operational costs
- The “Carbon Footprint” measured independently against DEFRA’s WRATE mechanism is exceptional (see above)
- The process recovers high grade recylcates before any burning
- The process is fully flexible to future advances in recycling technology, such as enhanced plastics separation and grading
- The process is high quality and consistent, fully automated with no long dwell times for organic waste



The well regarded consultant SLR in Bristol, described the process: “the Biocentre technology outperforms all other waste management technologies currently available at commercial scale in the UK.” (Tony Yates, SLR). Further details on the Biocentre process and history are available on request. Information can also be found at www.biocentre.co and detailed technical and third party diligence papers are available on request.

d. Deployment Plan

The R4C build and commissioning is a rapid process, with an established deployment model already approved for any B2 use site in the UK. Biocentre have a legal precedent and three “Certificate of Lawful Use” issued for this plant to be built under B2Construction and installation is typically 12-15 months, followed by a 3 month commissioning cycle with an operational site within 18 months.



Fund & Site Month 0-6

Contract/Procure - m 6-10

Build / Install - m 11-21

Comission - m 22-24

12. Frequently Asked Questions – FAQ’s

An extensive library of documentation is available to support investors in the R4C Recycling Plant, much of this can be provided to the community on request. There are also documents available for download and a FAQ section on the Company website, www.communityr4c.com

13. Comparison: Incinerator to R4C Recycling Plant



Figure 37 North West elevation

Javelin Park Incinerator and R4C plant show approximately to scale



	Planned UBB Mass Burn Incinerator	R4C Recycling Plant : Assumes Biocentre Process
Build Cost	£150M or more (exact figure unknown)	£15M
Gate Fee	25 year contract thought to be £100+ pt, £500M contract (now estimated £595M)	£20 pt household waste saving £10M+ pa (county wide) £50 pt for commercial and industrial waste – why would they send waste to the incinerator?
Height	<48m	<15m
Emissions	Dioxins produced, cleaned and emitted from 70m stack	No on-site burning. Fuel is clean, low chlorine, much cleaner than coal. Like wood pellets
Build Time	3 year build from consent and funding	<18 month build, 8 week planning cycle
Throughput	190 ktpa waste	130 ktpa waste (second line possible)
Carbon Footprint (GWP)	Better than landfill, but barely, locks in inefficient processes burning plastic, a fossil fuel	Exceptional net reduction of CO ₂ – over ½ tonne CO ₂ removed from atmosphere for every 1 tonne waste
Recycling and waste hierarchy	Very poor. All ‘residual’ waste is incinerated, no pre-sort to recycle.	Exceptional. Over 90% of all waste recycled before combustion or turned into biomass fuel to displace coal and virgin wood. Biomass fuel is >90% renewable
Local Economy	Heat available, but not where it is needed. Huge cost burden	Recycles and low cost biomass fuel can stimulate local economy – lower cost resources
Energy Efficiency	Poor. Heat is not used. Waste is burnt when wet. 22%	Exceptional. 80% +
Renewable Energy	Just 37% of the energy produced is renewable.	>90% of energy produced is renewable from biogenic sources.
Flexibility / Future tax	Huge structure inflexible to changes. Burns plastics, liable to incineration tax (similar to landfill tax) in future	Highly flexible to future improvements in sorting technologies and changes in household recycling as required by waste regulations 2011 and similar

14. Offer Summary

Time period:	This initial offer will be for 4 weeks from 29/04/16 to 27/05/16
Minimum investable amount:	£100 per person
Maximum investable amount:	£20,000 per person
Minimum offer amount sought:	There is no minimum; all funds pledged to investment will be drawn down by the society up to the maximum amount sought.
Maximum offer amount sought:	The society will accept up to £150,000 in this offer
<i>Online Investors:</i>	Visit www.crowdfunder.co.uk and invest via direct debit or credit card. No funds will be taken from investors until the close of the offer period on 27/05/16, or until £150,000 is secured, whichever is first.
<i>Offline investors:</i>	Fill out the form below, and return to the society. Cheques will be cashed immediately, providing the society's maximum offer target has not been reached. BACS transfers will be returned should the investment not be accepted due to the maximum target having been reached.

15. Application Form for Community Shares: Individual Subscribers

Community R4C Ltd
A Community Benefit Society registered by the Financial Conduct Authority, FCA,
under the Co-operative and Community Benefit Societies Act 2014. Registration Number: 7282
Registered address: The Exchange, Brick Row, Stroud, GL5 1DF

Application to subscribe for ordinary community shares of £50 each in the capital of Community R4C Ltd ("Shares") at £50 per Share

I wish to become a member of Community R4C Ltd in accordance with the Society's rules and apply for: £..... Shares at £50 per Share (minimum £100 and maximum £50,000)	
Agreement I am at least 16 years of age. I have read and agree the Community Shares Offer Document and the Rules of Community R4C Ltd. I understand the Society's Board may reject my application and does not have to tell me why it has been rejected.	
First Name:	Surname:
Address:	
Postcode:	Date of birth:
Telephone:	Email:
<input type="checkbox"/> Please tick if you wish to nominate a person to whom you wish your shares to be transferred on your death and complete the 'Nominee Appointment Form' on the following page.	
Payment Payment must be for the full value of the shares you wish to buy. Payments can be made by bank transfer or by cheque. For cheque payments, please enclose a cheque payable to Community R4C Ltd <input type="checkbox"/> Please tick here if you are paying by bank transfer. Transfers should be made, quoting your last name as the reference, to the following account: Triodos Bank Sort code: 16-58-10 Account Number: 20662394 Account Name: Community R4C	
Data protection & money laundering The data provided by you on this form will be stored within a computerised database. This data will only be used for Community R4C Ltd purposes and will not be disclosed to a third party, unless required by law. In signing this form, I confirm that Community R4C Ltd may hold any personal data submitted in this form in accordance with the Data Protection Act 1998. It is a term of the offer that to ensure compliance with the Money Laundering Regulations 2003, Community R4C Ltd may at its absolute discretion require verification of identity from any person(s) seeking to invest.	
Signature as confirmation of agreement Signature:	Date:

Please return to: Community R4C Ltd, The Exchange, Brick Row, Stroud, GL5 1DF

16. Nominee Appointment Form

This form should only be completed if you wish to nominate a person to whom you wish your shares to be transferred on your death. We will respect those wishes (so far as the law and our Rules permit).

Your name and address:

First Name:	Surname:
Address:	
Postcode:	

Please name your choice of nominee:

First Name:	Surname:
Address:	
Postcode:	

I understand that it may not be possible for Community R4C Ltd (“the Society”) to action this request and I and my heirs will not hold the Society responsible for its actions. I understand that these instructions can only be revoked or amended by my giving clear written instructions to the Secretary of the Society at the registered office. I understand that trustees will need to be appointed if my nominee is under 16 years of age.

I hereby confirm the above nomination

Signature:

Date: