

**Raising Awareness and Sustainability to the Bengali Community in  
Aberdeen  
Aberdeen Multicultural Centre  
April 2015 – March 2016**

**Name of project, organisation and CCF number**

CCF Reference Number: CCF – 3645

Project Name: Raising Awareness and Sustainability to the Bengali Community in Aberdeen

Organisation Name: Aberdeen Multicultural Centre

Address: 427 George Street, Aberdeen, AB25 1ER

**Starting Point**

Aberdeen Multicultural Centre (AMC) became a registered charity in 2011 (before it was serving communities in Aberdeen under different name and was a non-registered community group). The main aim of this organisation is to promote social & cultural harmony amongst diverse ethnic minority and local communities in Aberdeen city through organizing multi-cultural programmes in varied. The organisation's aims are to support communities and the society from social, economic, welfare and environmental perspectives. Aberdeen Multicultural Centre did not have any office space prior to this year's CCF project and was operated from committee members' homes. Bangladesh is one of the mostly affected country due to adverse climate change in the recent years. AMC has close connection with the Bengali community and always keen to do some project about the climate change. When we heard there is an opportunity to apply for a grant on climate change from the Keep Scotland Beautiful, AMC board decided to take this opportunity to involve on climate change project.

Aberdeen Multicultural Centre received funding from the Climate Challenge Fund to work with the Bengali community in Aberdeen to tackle climate change from April 2015 to March 2016. The Project has worked with local partners to support the Bengali community to decrease carbon emissions by increasing home energy efficiency. It enabled the community to grow more fruit and vegetables at home, decrease levels of food waste going to landfill and take up sustainable means of travel. This has resulted in further reductions in local carbon emissions, helping to combat climate change.

Aberdeen city is known as the 'oil capital of Europe' where people from all over the world have been migrating in search of better economic, social and welfare prospects. The Bengali community people have been present in this area for a long period and have

been integral part of this economy and the geographical area of Scotland.

Aberdeen is a large city which comprises of three large areas, Central, North and South Aberdeen. Each area has its own Parliamentarians and the Bengali community are based in all three areas. There is a population of approximately 4,500 Bengali speakers in Aberdeen City. This project intended to engage across the city with the Bengali community people. The target sample was 55 community households of approximately 197 users. The project Board members had active connections with each of the area's Bengali communities and community leaders.

Since AMC did not have any funds to carry out a baseline survey, AMC's management committee carried out informal consultations with the target population on a voluntary basis prior to the start of the project. This informed the development of the project in terms the level of energy use, travel and food wastage among the community. The Bengali community are a hard-to-reach community, with many of the households using Bengali language at home and many isolated members. The level of knowledge on climate change was found to be low.

The CCF project was funded to deliver the following Outcomes:

- Decrease CO<sub>2</sub>e emissions of the 55 target households by 368 tonnes over 7 years by implementing recommended energy efficiency measure and bringing positive behavioural changes to save household energy bills.
- Decrease CO<sub>2</sub>e emissions of the target households by 25 tonnes over 3 years by providing training to use bicycle. Bringing positive behavioural changes to save fuel consumption. Promote volunteering by providing training to at least 10 Community Volunteers (CVs). Adopting cycling as a means of replacing journeys mode using a more carbon intensive form of transport.
- Reduce CO<sub>2</sub>e emissions of the target households by 148 tonnes annually by adopting Zero-Food-Waste strategies.
- Increased community green spaces by establishing home yard gardens in 15 households
- Aimed to develop awareness of degree of carbon emissions, deforestation, chemical fertilisation and their adverse effects in the universe, in our environment such as climate change and in the subsequent effects on food production.

## Headline achievements

With support from AMC, Aberdeen's Bengali community have worked to reduce their carbon emissions and impact on climate change over the last year.

They have reduced their home energy usage (and bills), using energy monitors to keep track of their energy use and by implementing simple energy efficiency measures – such as switching to energy efficient lightbulbs, improving insulation and altering behaviour around the home. AMC has partnered with Home Energy Scotland to organise Home

Energy Checks for participants, delivering recommendations for further improvements. 56 households have taken part and the changes made will reduce more than 100 tonnes of carbon emissions over the next 7 years.

In conjunction with Aberdeen City Council's Waste Aware Team, CFINE and Love Food Hate Waste, the Bengali community has worked to reduce food waste. AMC has hosted workshops and training to help people identify any food excess, change shopping habits, create new recipes and divert food waste from landfill, saving over a tonne of carbon emissions. In addition, AMC has supported people to grow their own food at home, reducing food miles and carbon emissions. The 12 participating households have produced more than 63 kg of food.

AMC has also operated a successful bike loan scheme among the community. People have been encouraged to swap their usual transport for cycling, cutting down on emissions in the process. Despite the Aberdonian weather, people have been using their bikes around the city. Almost 1000 miles have been cycled and the 10 bike loans will save more than 3 tonnes of carbon emissions over 3 years.

The positive impact on climate change will continue over the coming years, as people continue to implement the changes they have learnt from the project.

## Activities

Having received confirmation of funding at the end of March 2015, the first 2 months of the project centred around setting up the Aberdeen Multicultural Centre office and recruiting project staff in order to deliver the project. The CCF funding is the first major external funding this organisation has received and so it is the first time AMC has been able to rent a dedicated space to operate from and employ staff to run a project.

Office space was found and secured on George Street, Aberdeen and the project staff were recruited. Advertisements were placed for a Project Manager (20 hours per week) and 2 Community Outreach Workers (12 hours per week each). Interviews took place on 27th April 2015, and were conducted by a panel of interviewers from Aberdeen Multicultural Centre, Aberdeen City Council Equalities Team, Aberdeen Council of Voluntary Organisations and an independent HR expert. Following the interviews, 3 members of staff accepted their offers of employment:

- Sarah Benzie – CCF Project Manager
- Magdalena Bereza – CCF Outreach Worker
- Ron Bird – CCF Outreach Worker

The staff were able to take up their positions by July 2015 and before they were on seat, representatives from Aberdeen Multicultural Centre conducted background work for the project. Volunteers were selected to help with the running of the office and community volunteers from the Bengali community were identified.

In addition, the Project Steering Committee was established. The Steering Committee comprises of:

- Ahashan Habib – Aberdeen Multicultural Centre
- Dr Momtaz Haque – Bengali Community Member
- Choudhury Md Luthful Hoque – Bengali Community Member
- Liz Howarth – Aberdeen Council of Voluntary Organisations
- Dinesh Thapa – previous CCF Project Manager at Organisation for Nepalese Culture and Welfare
- Mohamed Nazmul Hoque Chowdhury

The official Launch of Aberdeen Multicultural Centre and our CCF project on 22nd July 2015 was a big success, with over 70 people attending. Among the guests were: the Lord Provost of Aberdeen, SMP Lewis McDonald, and representatives from ACVO, GREC, Aberdeen City Council, Langstane Association, CEMVO, SCARF, RAS, SHMU radio as well as members of the Bengali Community of Aberdeen. The Lord Provost of Aberdeen opened Aberdeen Multicultural Centre, and the Climate Challenge project was introduced to the guests. Aberdeen Multicultural Centre’s Chairperson, Mr Nazmul Chowdhury, signed Scotland’s Community Pledge, demonstrating the Centre’s support and commitment to taking local action on climate change. One of the Project’s Steering Group, Dr Momtaz Haque, stressed the importance of the Climate Change project for the Bengali community. The guests also took part in ‘Be one in a 1000’: The CCF/ CEMVO Scotland led project to create a collage of 1000 faces, providing a visual impression of climate voices from across Scotland towards Paris 2015.



Following the launch, the project was officially underway, and we focussed on 5 main areas of work. These correspond with the Outcomes we were funded to deliver and are as follows:

- Home Energy Efficiency
- Community Bike Loan Scheme
- Food Waste reduction
- Home Yard Gardening
- Climate Change Awareness Raising

East strand of work followed a different journey, and the highlights are outlined below.

### HOME ENERGY EFFICIENCY

At the start of the project, the Project Manager held a meeting with SCARF/Home Energy Scotland to discuss ways to work together for the home energy element of the project. The planned approach was for the Outreach Workers to use Home Energy Scotland's Home Energy Check and to support community members to complete the form and help them to implement the recommendations following it the check.

Following Outreach Worker training, provided by Home Energy Scotland and some shadowing of another local CCF project, a survey was created and distributed among the community to gauge interest in home energy efficiency and work shop attendance. The surveys were handed out by volunteers, emailed out to community members and shared on our website and through social media. Based on the answers to the survey, community members were invited to home energy workshops in September

In the lead up to our events, the outreach workers and community volunteer conducted a series of door-to-door home visits, as well as making phone calls to remind people about what was happening. Community members who had expressed interest in finding out more about home energy efficiency when they completed the survey were also individually invited to workshops.

Two home energy efficiency workshops were conducted at the centre in September 2015 and one took place, in conjunction with Home Energy Scotland, in October 2015. During these workshops, participants were provided with information on climate change and CO2 emission related to the households, how energy is consumed, home improvement methods and smart ways to minimise CO2 emissions. The participants were shown how much energy is consumed by typical household appliances and discussed ways to reduce their own energy usage, with reference to behaviour change as well as material changes that could be made at home. The participants were also invited to complete Home Energy Scotland's Home Energy Check survey. This was then passed onto SCARF so that the community members received recommendations from Home Energy Scotland on what they can do to reduce their home energy consumption.



The home visits and workshops up until October 2015 revealed how difficult it was to collect energy data from the community. Despite being asked repeatedly for information on their home energy consumption, community members were unwilling to share it. This is for two key reasons – the first is that the majority of people we worked with have prepayment meters and they do not have a record of how much energy they use as a result. None of the community members we have spoken to had an annual statement and most were not aware that they were able to get one. The second reason was that people were initially unwilling to share their data with us – it takes a long time to build up the trust to do so.

As a result, in October 2015, we devised a new approach, to ensure this element of the project was successful. The plan was as follows:

1. The Outreach Workers would go into each household, install an energy monitor, and take basic information about the household (including current gas and electricity meter readings, as a back-up). The Community member would be supported to complete a Home Energy Check form from Home Energy Scotland (HES). We would pass this form to Home Energy Scotland and refer the community member to them.
2. The Outreach Worker would return to the same household after a week and record the energy use from the monitor, as well as gas and electricity meter readings. This provided us with baseline data. The Outreach Worker would deliver behavioural advice, leave a Bengali language HES leaflet of information for the household and install up to 4 energy saving lightbulbs and draught excluders where appropriate. The monitor would be left for a further week.
3. The Outreach Worker would return after another week to collect the energy monitor data and see what the usage had been since the intervention.
4. The community member would then be contacted by HES with any further advice and support. The Outreach Workers would continue to provide further support where appropriate.

From October to March, we followed this plan, conducting a series of home visits in the community, using checklists we had developed to capture appropriate data. We also

formed a link with EcoHub Scotland, a local green energy specialist, who provided us, and our community members, with discounted energy efficient lightbulbs and energy monitors. EcoHub Scotland were also able to advise community members looking for further information.

We worked closely with Home Energy Scotland, developing a data sharing agreement between our organisations. Home Energy Scotland Have provided community members with individual Home Energy reports and Outreach Workers from Aberdeen Multicultural Centre were able to assist them to understand the reports they receive, as needed. Home Energy Scotland have also produced one of their home energy efficiency leaflets in Bengali for us to distribute among the community during home visits.



In summary, from October 2015 to March 2016:

- 99 Home Visits were conducted in total
- 41 First Home Visits were conducted, and monitors installed
- 30 Second Home Visits were conducted during which baseline readings were taken, home energy advice was given and energy saving lightbulbs were installed
- 28 Third (and final) Home Visits were conducted during which carbon saving data was collected and further advice was given
- 28 Community Members completed Home Energy Checks and were referred to Home Energy Scotland
- 92 energy saving lightbulbs were installed



The result is that we saw an overall reduction of 141.17 kg CO<sub>2</sub>e over the course of one week from 28 households. Assuming they maintain this reduction, it would be 7340.84 kg CO<sub>2</sub>e over one year and 51.386 tonnes over the next 7 years. While 28 households received a series of 3 home visits, in total 56 households have been involved in the project and received at least one home visit during the course of the project. If all of these households achieve the same average saving over the next 7 years, the total would be 102.772 Tonnes CO<sub>2</sub>e.

### COMMUNITY BIKE LOAN SCHEME

AMC’s bicycle loan scheme was developed following consultation with members of the Bengali community in Aberdeen and advice from local and national bicycle scheme operators (for example The Bike Station in Glasgow and BeCycle Aberdeen). While the original proposal was to buy reconditioned bicycles for the project, the consultation with community members suggested that the bicycles would be more valued if they were new, and therefore, the scheme would be more likely to succeed. As a result, we decided to purchase 5 new bicycles and will make up the following 5 with a combination of donated reconditioned bikes and new ones as necessary.



Five bicycles were purchased through The Bike Station in Glasgow. As another CCF-

funded project, it was an appropriate place to order the bicycles and they were able to provide 5 new bikes, lights, helmets, pannier racks, pannier bags, and puncture kits for a competitive price. The bicycles were displayed at the AMC's Launch on 22nd July 2015, and the loan scheme became operational in August 2015.

In August 2015, the 5 new bikes were loaned out to community members – 4 males and 1 female. Our Outreach Worker spent a long time explaining the project to each individual participant and gave them a travel diary to complete for the time that they have the bikes on loan. The bikes were received enthusiastically by those people using them.



During September, the 5 bikes were all in use by their community members, and we continued to collect bike diaries from the participants showing how much cycling they were doing, and how many miles they would otherwise have used another mode of transport for. As expected, some of the participants used the bike more than others, but all of them used the bike at least weekly. One community member described the bike loan as 'life changing' and became very enthusiastic about cycling, encouraging other people to do the same and even purchasing a bike for his son as a direct result of the loan scheme.

During October, our Outreach worker collaborated with Alain Cain, a bicycle maintenance expert and took part in a bike maintenance workshop. This enabled us to recondition 3 old bikes and bring them up to standard to be lent out in the community. One of these bikes was loaned to a new cycle scheme member.

The Bike loan scheme continued through the winter, with our Outreach Worker providing support as necessary to the participants of the scheme. While most of the participants

continued to cycle to some degree, many were not able to cycle as much as they were during the warmer months of the year. In the cold, wet and dark Aberdeen winter, many people are not as keen to cycle as much on city roads. Another issue that we encountered, was that two of the participants have returned to Bangladesh for more than a month each, meaning that they were unable to cycle during this time. Despite these challenges, the cycle diaries continued to work well as a method for collecting data.

Over the winter, three more old bicycles were reconditioned and fitted out with the relevant safety items to enable them to be loaned out. We again partnered with The Bike Station in Glasgow to purchase the necessary bike accessories. These bikes were loaned out in March, as the Spring weather is more conducive to cycling than the winter.

## FOOD WASTE REDUCTION

We have worked with Love Food Hate Waste, through CFINE (Community Food Initiatives North East) in Aberdeen to deliver a series of workshops on food waste tailored specifically to the Bengali community.

In order to encourage some project ownership among the community, we initially ran a focus group about food waste reduction to get their ideas of how they would like to shape the programme. Sarah Robertson from Love Food Hate Waste hosted the discussion in September 2015, which informed the workshops that we delivered later.



In October 2015, we worked in collaboration with CFINE (Community Food Initiatives North East), a local LOVE FOOD HATE WASTE organisation to deliver a food waste workshop to the community. We developed leaflets and made home visits and phone calls to invite people to the workshop. Sarah Robertson from CFINE used the information gained from her previous focus group to shape the work shop and she focussed on shopping strategies and meal planning to reduce food waste. At the workshop, participants were given a food waste diary to complete.

In addition to CFINE, Aberdeen City Council's Waste Aware Team also presented during the workshop. They promoted recycling and shared information on the food waste collection scheme that has recently been rolled out across Aberdeen. The Team also

provided their information leaflet translated into Bengali for the community, which we have shared with them. As the workshop was during the half term holidays, we organised activities around recycling for the children to participate in.



During January and February 2016, we participated in Aberdeen City Council's 'Love Your Caddy' campaign, holding several meetings with representatives from the Council. In addition, we conducted a series of home visits in the community. During the first home visit, our Outreach Worker weighed a caddy of food waste and asked the community member how many caddies were thrown away that week. Following this, the Outreach Worker gave advice on food waste, and how to reduce it. We found that there was a lack of knowledge about Aberdeen City Council's food waste caddies in general, so the Outreach Worker was able to address this. The following week, another home visit was conducted, to see what changes have been made in the household.

On 16th March, in conjunction with Love Food hate Waste, we held a 'curry competition' where participants showcased their dishes made from leftover food. A range of dishes we produced, and the workshop participants were able to taste them all and share recipe ideas. At the end of the workshop, the participants voted on their favourite dishes and the top two will be included in an upcoming recipe book to be launched by Love Food Hate Waste in Autumn 2016.



### HOME YARD GARDENING

Due to the time frame for planting and growing vegetables, the majority of work for our home yard gardening project took place in the Spring and Summer of 2015. AMC’s committee members purchased and distributed gardening supplies to 12 households in the Bengali community before the project staff were recruited. This enabled 12 home yard gardens to be established within the community, where the community members could grow their own produce.



From June 2015 onwards, our Outreach Worker conducted a series of home visits to the families involved in the home food growing element of the project. During these home visits, he was able to see how people were progressing with their food growing and to offer advice and support to them. The produce grown and used was weighed by participants as they progressed. There were lots of strawberries and potatoes grown, despite the poor summer weather experienced in Aberdeen in 2015.



As the seasons changed, there was less activity for our home yard growing project. However, we continued to provide support to growers through Outreach Worker visits and phone calls, often in conjunction with another element of the project. We have collected data on the produce grown and are hopeful that participants will continue to grow more food over the coming years, now that they have established their home yard gardens.

#### AWARENESS RAISING

AMC have been raising awareness around climate change throughout the duration of the project. All of our activities have highlighted the need for action on climate change. We have also linked in to various local and national campaigns and promoted them through our website and Facebook pages, as well as in the Centre itself.

During our launch in July 2015, Aberdeen Multicultural Centre signed Scotland's Community Climate Change Pledge demonstrating our commitment to climate change.

Throughout the project, we have had 3 different articles published in local magazines. Two of these were in Aberdeen City Council's Green Times magazine (in September 2015 and March 2016). The other was in 'North Sea' magazine. These articles have promoted the work of the centre, the CCF and climate change action in general.

We worked with a local video artist, Lee Hentze, to document and publicise our activities. He has produced photos and videos of our work that we have shared. This has helped to further our awareness raising efforts.



In October, Aberdeen Multicultural Centre participated in Aberdeen's Durga Puja festival, providing volunteers and meeting many members of the community. This gave us an excellent opportunity to promote the Centre itself and, more specifically, our Climate Change project. During the event, our Outreach Workers were able to meet with community members and discuss the project. They handed out leaflets and advertised our upcoming food waste and home energy workshops during the event.

We worked with Aberdeen City Council's Waste Aware Team to produce an information leaflet on local recycling services in Bengali language. This has been shared at workshops, home visits, and distributed in the community via Facebook and is attached to this report. Home Energy Scotland also developed a Bengali-language home energy leaflet for us, which we are sharing widely in the community.

In February 2016, we actively promoted Aberdeen City Council's Love your Caddy Campaign - a competition encouraging people to 'love your caddy' by 'feeding' it with the right stuff to recycle, and not wasting food. To enter, people had to 'Like' the Recycle for Aberdeen Facebook page and post a selfie with your food recycling caddy. We also held a stall at Aberdeen Multicultural Centre's International Mother Language Day Event, which was attended by over 400 people. Here, the project was explained and climate change awareness was promoted.



During the final month of the project, we promoted the activities of Climate Week and Earth Hour to our community and beyond.

## Outcomes

### HOME ENERGY EFFICIENCY

Outcome: Decrease CO<sub>2</sub>e emissions of the 55 target households by 368 tonnes over 7 years by implementing recommended energy efficiency measure and bringing positive behavioural changes to save household energy bills.

Result: Outcome partially delivered

Number of Households reached	56
Number of People in households	182
Number of Home Visits conducted	113
Number of Workshops Held	3
Number of Workshop Participants	19
Number of Bengali language leaflets produced	1
Number of households completing 3 home visits and providing data	28
Number of participants referred to Home Energy Scotland for Home Energy Checks	28
KWh of energy saved per week by 28 households	305.44
GHG Emissions (kg CO <sub>2</sub> e) saved per week by 28 households (Calculated using KSB emissions factor of 0.462)	141.17
Assumed GHG Emissions (kg CO <sub>2</sub> e) saved per YEAR by 28 households (Calculated by multiplying by 52 weeks)	7340.84
Assumed GHG Emissions (kg CO <sub>2</sub> e) saved OVER 7 YEARS by 28 households	51385.88

(Calculated by multiplying by 7 years)	THIS IS 51.386 TONNES
Assumed GHG Emissions (kg CO <sub>2</sub> e) saved OVER 7 YEARS by all 56 households (Calculated by multiplying up to 56 households)	102771.76  THIS IS 102.772 TONNES

In the home energy efficiency element of our project, we have reached 56 Bengali households in total. The members of these 56 households received home visits, attended workshops on home energy efficiency, or both. Although we have had contact with 56 households, we were able to collect data from 28 households only. This is largely due to the timescale of the project, in that the Outreach Workers did not have enough time to reach all 56 households for the series of 3 home visits that generated the data we required. Some members of the community also did not wish to complete the project, and this, of course, was respected.

The 28 households that completed the series of 3 home visits provided us with data for a week of 'normal' energy usage and a week of energy usage following our Outreach Worker's intervention and advice. This showed a reduction of 141.17 kg CO<sub>2</sub>e between the 28 households per week. As shown in the table above, to calculate how much of a reduction would be seen over 7 years, we have assumed that:

- The weekly reduction would be consistent every week
- All 56 households that were involved in the project would save the same amount of energy
- The annual reduction would be consistent for seven years

Using these assumptions, the total saving 102.77 tonnes CO<sub>2</sub>e. This is less than the predicted outcome of 368 tonnes CO<sub>2</sub>e over the course of 7 years.

There are several reasons that could explain why we achieved lower savings than anticipated. The first is that the original expectations were set too high. Without an accurate baseline survey having been conducted, AMC members had to rely on informal consultations when preparing the application and the data may not have been representative of the whole Bengali community.

In addition, our methodology only collected data for 2 comparison weeks. This is a very short space of time and may not be representative of usual energy consumption. We have not been able to account for changes in weather or circumstances from one week to the next. Aberdeen has had a wet and cold winter, with some weeks being a lot colder than others, so it may be that more energy was used during those weeks than expected. We also collected data before and during the Christmas period, where people's behaviours are noticeably different. With more people in their houses during this time,

energy consumption was higher and we saw only a very small energy reduction for those households where our post-intervention data was collected over the Christmas period.

Although we have not been able to show the reduction in carbon emissions that we had originally hoped to, this element of our project has been a great success. We have shown a total saving of 102.77 tonnes CO<sub>2</sub>e, and we expect the reality will, in fact, be higher than this. We have engaged 56 households in the project, reaching 182 people and educating them about climate change and home energy reduction. We have held 3 workshops, conducted 113 home visits and referred 28 households to Home Energy Scotland for further energy savings advice. In conjunction with Home Energy Scotland, we have also had a Bengali language home energy information leaflet produced, meaning that this hard-to-reach community now have access to advice in their own language.

We have seen behavioural changes in our community, with people altering the way they act in their homes, as demonstrated by our case studies. One of the greatest unintended outcomes is that people are now educated and empowered about what they are paying for their energy. Many people in the Bengali community have pre-payment meters and were not aware that they could track their energy usage and spending, or that they were able to ask for annual summaries of their bills from their suppliers. Our Outreach Workers have been able to show people how to do this, and as a result they are in control of what they pay for their bills, as well as now knowing how to reduce them.

#### COMMUNITY BIKE LOAN SCHEME

Outcome: Decrease CO<sub>2</sub>e emissions of the target households by 25 tonnes over 3 years by providing training to use bicycle. Bringing positive behavioural changes to save fuel consumption. Promote volunteering by providing training to at least 10 Community Volunteers (CVs). Adopting cycling as a means of replacing journeys mode using a more carbon intensive form of transport.

Result: Outcome partially delivered

Number of bikes loaned into the community by the end of the project	10
Number of bikes reconditioned	5
Number of Bike maintenance workshops held	1
Number of bikes loaned out for 7 months of the project	6
Number of miles cycled by 6 participants	993

instead of using a car	
Number of miles cycled by 6 participants instead of using a bus	221.2 (356 km)
GHG Emissions (kg CO <sub>2</sub> e) saved by 6 participants over 7 months (Calculated using KSB emissions factor of 0.312 for car travel and 0.100 for bus travel)	354.23
Assumed GHG Emissions (kg CO <sub>2</sub> e) saved per YEAR by 6 participants (Calculated by multiplying up to 12 months)	607.25
Assumed GHG Emissions (kg CO <sub>2</sub> e) saved per YEAR when all 10 BIKES are in use (Calculated by multiplying up to 10 bikes)	1012.08
Assumed GHG Emissions (kg CO <sub>2</sub> e) saved OVER 3 YEARS when all 10 BIKES are in use (Calculated by multiplying by 3 years)	3036.25  THIS IS 3.036 TONNES

By the end of our project (March 2016), we have 10 bikes loaned out in the Bengali community. For the majority of the project, we had only 6 bikes on loan, however. This is because we were unable to get all 10 bikes ready before the onset of winter. We decided that the final 4 bikes should be loaned out in the Spring of 2016, as they would be more likely to get better use at this time of year, rather than during winter.

We chose to buy 5 new bikes, and recondition the other 5. This was after receiving feedback from the community that new bikes would be held in greater regard than 'old' bikes. We have held one bike maintenance workshop and our outreach worker has provided ongoing support to the community members participating in the scheme.

Over the course of 7 months, 993 miles have been cycled instead of using a car and 221.2 miles have been cycled instead of using public transport. This gives us a total carbon saving of 354.23 kg CO<sub>2</sub>e that we have recorded during the project. Now that there are 10 bikes loaned out into the community, we have calculated the expected saving over 3 years by assuming that

- The 4 recently loaned bikes make the same average saving as the previous bikes

- The 7 month timescale is representative and can be multiplied up to 3 years

This gives us an estimated saving of 3.036 tonnes CO<sub>2</sub>e. This is less than the predicted outcome of 25 tonnes CO<sub>2</sub>e over the course of 3 years.

In reality, we would expect the figure to be a significantly higher. As a result of the time pressures of the project, the bike loan scheme did not start until September 2015. With the project finishing in March 2016, this means that our 7 month period of the bike scheme took place mainly over winter. We anticipate that as the weather improves in spring and summer, there will be more cycling from our community members. The weather in Aberdeen over the winter this year was particularly cold and wet, making cycling very challenging in the city.

The community bike loan scheme has been successful, despite not achieving the level of carbon savings predicted. The people involved in the scheme have become passionate about cycling and have been advocating it to friends and family members. The community outcomes of this project are clear, with more people enjoying cycling as a healthy and social activity. Our case study of Snehashish Banik shows how he has been encouraging his son and friends to cycle.

## FOOD WASTE REDUCTION

Outcome: Reduce CO<sub>2</sub>e emissions of the target households by 148 tonnes annually by adopting Zero-Food-Waste strategies.

Result: Outcome partially delivered

Number of Focus Groups Held	1
Number of Food Waste Workshops Held	2
Number of Households reached	30
Number of Participants at Workshops and focus Group	30
Number of Bengali language leaflets produced	1
Number of Home Visits conducted	45
Number of people in households	105
Number of households completing 2 home visits and providing data	16

Kg of food waste reduced by 16 households in one week	3.3
GHG Emissions (kg CO <sub>2</sub> e) saved per week by 16 households (Calculated using KSB emissions factor of 4.06 average embodied emissions for food and drink)	13.398
Assumed GHG Emissions (kg CO <sub>2</sub> e) saved per YEAR by 16 households (Calculated by multiplying by 52 weeks)	696.696
Assumed GHG Emissions (kg CO <sub>2</sub> e) saved per YEAR by all 30 households (Calculated by multiplying up to 30 households)	1306.31  THIS IS 1.306 TONNES

We have worked in partnership with both Aberdeen City Council and CFINE to deliver two successful workshops, and have reached 30 households with 105 members. We have worked with Aberdeen City Council's Waste Aware Team to create and distribute a Bengali language leaflet on food (and other) recycling services in Aberdeen. We have conducted 45 home visits to community members to focus on food waste and 16 households have taken part in a two week scheme to collect data from food waste caddies.

The food waste reduction strand of our project has been a challenging one. There have been two main issues in delivering this project. The first has been the community perception of 'food waste', with few people open to admitting that they create food waste. Many members of the Bengali community were already very proactive in using up all their food, regularly making dishes from leftovers.

The second problem has been in collecting data on food waste. We shared food waste diaries following our first workshop, but these were not well received and we did not manage to collect any completed ones. In order to collect some data, we compared the weight of food thrown away in food waste caddies before and after our Outreach Worker had given advice about food waste.

This generated 3.3kg of food waste savings over a week, which is the equivalent of 13.40 kg CO<sub>2</sub>e. To estimate the savings made over one year, we have assumed that

- All households participating in the project made the same average saving
- One week's saving can be multiplied by 52 to give us an annual figure.

Doing this gives us an annual saving of 1.306 tonnes CO<sub>2</sub>e, which is significantly lower than the expected 148 tonnes CO<sub>2</sub>e outcome.

We believe this figure to be considerably lower than the actual savings achieved by the project. We conducted workshops focussing on shopping strategies and on cooking with leftovers, among other themes. The data we have only reflects what goes into the food waste caddies, and this is not an accurate reflection of the food that has been saved by the project's activities. The difficulty we had in collecting data has made it hard to report accurately on this outcome.

We have seen many unintended outcomes to this project, in addition to our carbon savings. We found that many people in the community did not know about how Aberdeen City Council's food waste recycling scheme worked. There was a lack of understanding about what could go in the caddies. Through our workshops, home visits, our new Bengali language information leaflet, and participating in promotional campaigns, we have been able to share information and advice on what can go into the caddies. While this may have actually increased the amount of waste going into the caddies, it has certainly diverted a great deal of food waste from going to landfill instead.

Our leftovers curry competition at the end of the project was a success, with the participants sharing recipes that they had developed to use up leftovers.

## HOME YARD GARDENING

Outcome: Increased community green spaces by establishing home yard gardens in 15 households

Result: Outcome partially delivered

Number of Home Yard Gardens established	12
Number of Home Visits conducted (excluding home visits which were part of another strand of the project)	15
Kg of Food grown and consumed	63.05
GHG Emissions (kg CO <sub>2</sub> e) saved by 12 households (Calculated using KSB emissions factor of 4.06 average embodied emissions for food and drink)	255.983

Most of the work on this strand of our project happened in the early stages, to capitalise

on the growing season. We purchased gardening materials, provided advice and our Outreach worker conducted 15 home visits to help the community members with growing their produce. While the expected outcome was to establish 15 home garden, the project has successfully established 12. Three more families initially expressed interest in taking part, but in the end they did not wish to participate. Due to the timing of the project and the weather, it did not make sense to introduce more gardens later in the project.

We have collected data on what has been grown throughout this project, and 63.05kg of food has been produced and consumed. This is equivalent to a saving of 255.98 kg CO<sub>2</sub>e. This data shows only the first year of growing, and now that the gardens are established, we expect the growing to continue and the amount of produce is likely to increase year on year.

## AWARENESS RAISING

Outcome: Aimed to develop awareness of degree of carbon emissions, deforestation, chemical fertilisation and their adverse effects in the universe, in our environment such as climate change and in the subsequent effects on food production.

Result: Outcome met

Number of Awareness Raising Events Held	2
Number of stalls held at other events	1
Number of articles produced for local publications	3
Number of Workshops Held	6
Number of participants at workshops	49
Percentage of workshop participants who reported increased knowledge and awareness	81%

Throughout our project, alongside all other activities, we have worked to develop awareness among the Bengali community about climate change. We have given the context for the work we are carrying out at all times. We have used our website and social media pages to highlight our own work and other local and national climate change campaigns. Throughout the year, we have held 6 workshops on various topics, but all have contained a message about climate change. Surveys of the people attending these workshops reveal that 81% believe that their awareness of climate change has increased as a result of our project.

Aberdeen Multicultural Centre has organised two big events during our project time. The first was our launch, where we delivered a climate change message and signed the Climate Change community pledge in front of over 70 people in July 2015. The second was the Mother Language Day celebration in February 2016. At this event, attended by over 400 people, our Outreach Workers were promoting the work of the CCF and raising awareness on climate change. In addition, during 2015s Durga Puja, we held a stall on climate change.

Our project has been covered in 3 local publications – Aberdeen City Council’s Our Green Times Autumn 2015 and Spring 2016, as well as North Sea Magazine. We have participated in local campaigns and events – such as Aberdeen City Council’s Love Your Caddy campaign and Climate week, National Ride to Work Day and other local CCF project activities, promoting local climate change events and information to the Bengali population of Aberdeen.

As a result of our project, there is now relevant information on home energy and recycling available to the community in their native language.

## Learning & Reflection

While the project has had many successes, we have also faced challenges, some of which have already been highlighted in the Outcomes section.

The largest overall challenge to the delivery of the project has been the timescale. With only one year to deliver the project from start to finish, timing has been tight throughout. We have worked with a hard-to-reach community, and in order to gain the trust and respect of community members, we had to conduct a great deal of networking. We have employed two Outreach Workers for the project, however they have been contracted to work just 12 hours per week. This has not provided enough time for them to reach all the people they would have hoped to, despite their hard work over the year. In future projects, more Outreach Worker hours would help to address this.

At the very beginning, the project was a little slow to get started. This is because the funding decision was announced at the end of March 2015, when the project plan envisaged a start of April 2015. Recruiting staff took time after this and as the organisation has not received funding previously, the centre also needed to be set up. Earlier notification of funding awards in future would clearly help to alleviate these problems, but also making sure the project plan takes into account how long is required to recruit and induct staff and volunteers would be beneficial. In addition, AMC is now in a much better position to start any new projects, because the centre itself has been established and is already set up to start new projects.

Since there were no staff at the centre before this funding, the Project manager was not involved in the development of the project, or the recruitment of the Outreach Workers. It would have been easier if the Project Manager had been involved in the project proposal and staff selection.

A significant barrier we have had to work against throughout the project has been to engage the community in our activities. The Bengali community are hard-to-reach and dispersed in Aberdeen. As already mentioned, our Outreach Workers had just 12 hours per week each for the project, so their time was very limited. Another challenge has been that none of the project staff are members of the Bengali community. A member of the target community on the project team is essential for future projects. If this is not a member of staff, a volunteer community champion is absolutely necessary and efforts should be made to appoint one. Many hours of Outreach Work are required to generate and sustain appropriate community involvement.

Throughout the project, we worked to address community engagement. Some of the approaches we tried were:

- Recruiting a Bengali volunteer at the Centre, who was able to act as a community link
- Engaging the Chair Person and Secretary of AMC more in the project, and requesting their help in promoting the project
- Taking advice from the Steering Committee of the project, which has included a suggestion of approaching the community through the mosques in Aberdeen
- Conducting more home visits and phone calls, spending more time with individuals to encourage and support participation
- Organising other events at the Centre (such as food hygiene training) not linked to the project, to draw more people in

The turn out to some of our workshops was excellent, and there was a clear link between the amount of hard work in advertising an event to the community and the number of people in attendance. However, we did not always have the resources for as many phone calls and home visits as we would have liked.

Due to a lack of previous funding, there was no baseline survey completed before the start of the project. This meant that some of the assumptions made in the original project proposal did not reflect the reality of the project community accurately. As a result, we have had to try different approaches throughout the year in order to deliver a successful project. Having flexibility in the project approach has been essential in enabling us to achieve as much as possible.

As this is the first time a budget has been prepared, some mistakes were made, meaning the budget did not include some essential items, such as utilities for the centre and heating. We have addressed issues like these by moving money between budget headings as necessary. The actual spending and budget headings from this project will help to inform future projects in terms of finances, and the capacity of the Centre has grown as a result of this project.

The original outcomes target or this project were very optimistic, particularly given that the project aimed to address several different strands of work. As a result, the outcomes have been partially delivered this year, achieving significant carbon reductions, but

managing to meet the high carbon targets set out at the beginning This was the first funding application of its kind made by AMC, and the learning from this first year will enable more realistic targets to be set. The project staff were spread too thinly between the different strands of the project, and in future it may be better to focus on one or two elements instead. The most successful strand of work conducted focussed on home energy efficiency, so this would be a logical starting point for future projects.

## Finance & Administration

The CCF funding was the first funding of its kind that AMC has received and the centre itself was established within this year. As a result, there has been a lot of learning and development for AMC, which should be beneficial for future projects and programmes.

As AMC is newly established, all internal policies and procedures have had to be created this year. This includes creating new contracts, outsourcing payroll activities and developing forms for expenditure such as expenses and mileage. These are now in place to be used again in future.

The overall budget applied for from CCF was £46816.90 and all of this money has been spent this year. While the overall budget has been adequate for the activities of the project, the budget headings did not reflect the way the money has needed to be spent. Several items were missing from the budget altogether, including:

- Utilities for the centre
- Payroll/contact costs
- Employers NI contributions
- Adequate training costs for staff
- Heating for our Office space

In addition, there were some areas where additional spending was required. For example, the costs for office equipment were underestimated before the office space was established. There was some underspend in certain budgets, for example overnight hotel expenses, travel and guest speaker fees, which allowed us to move the money to where it was needed throughout the course of the year.

CCF project has given AMC a breakthrough to develop the centre's capacity and resources to grow. The centre is well equipped to run the bigger project in the future.

## Supporting information

Please find attached our supporting information:

- 2 Community Member Case Studies
- 3 published magazine articles
- Recycling guide and home energy guide in Bengali
- Travel Diary
- Data spreadsheets for home energy, food waste and travel

- Activities Tracker spreadsheet

**Name of report authors and date it was finalised:**

Sarah Benzie, March 2016

**Activities Grid** – Please fill in only those outputs which relate to your project. More information about all of these outputs can be provided in other sections of the report – these figures will enable us to collate some overall impacts of the CCF.

How many **advice/information centres** – regular drop-in centre, advice surgery etc. - is your project running?

How many **training sessions where skills and/or information were passed on** – e.g. composting training, cooking workshops, etc. – has your project has held.

7

How many **events** did your project hold, e.g. information fairs, open days, etc.? Do not include events held by other organisations which you have attended.

2

How many staff, volunteers or community members have achieved **qualifications** through the project – e.g. City & Guilds Energy Awareness, Trail Cycle Leader, etc.

How many people were **directly employed** by your project? Tell us the full-time equivalent (FTE) number of employees (e.g. 3 days per week = 0.6 FTE).

1.2

Is the project is supporting the development of any **long-term jobs** which are not dependent of CCF Funding? How many?

How many **people are actively involved** in your project – attending groups & workshops, using the project facilities etc.?

30

How many **people volunteer** their time and energy to keeping the project going – don't forget the members of your management committee or board.

10

How many **schools** are involved in your project?

How many **community-owned buildings** have been refurbished?

How many **Home Energy Checks or similar energy efficiency reports** have been carried out by your project?

How many households have been **referred on to other agencies or**

28

<b>providers</b> (e.g. HES, Green Deal assessor) for further action?	
How many households <b>installed energy efficiency measures</b> – loft, wall or floor insulation, draft-proofing, double glazing etc. – as a result of your project?	28
How many households <b>installed green energy generation measures</b> – photovoltaic panels, solar thermal panels, air or ground source heat pumps, wood fuelled heating systems etc – as a result of your project?	
How many <b>miles of car journeys have been reduced</b> through the activities of your project?	993
How many <b>square metres (m<sup>2</sup>) of community growing space</b> (allotments, poly-tunnels, raised beds, community gardens) has your project brought into use?	
How many <b>tonnes of waste</b> have been diverted from landfill because of the activities of your project?	
How many <b>kWh of energy</b> has been reduced because of the activities of your project?	15882.88