PATHWAYS TO A SUSTAINABLE NORTH EAST

ACA CONSULTATION REPORT

ABERDEEN CITY COUNCIL & ABERDEENSHIRE COUNCIL

July 2019

Aberdeen Climate Action

Introduction 4

This Report 4

The Existential Risk 5

Background: The Climate Emergency in Scotland 6

Areas Where Change Is Required 6

Theme 1: Transport and Infrastructure **7**

Issue 1: The planning process of Aberdeen's transport and infrastructure 7

Actions/Recommendations 9

Issue 2: Necessary culture Shift 11

Actions/Recommendations **Error! Bookmark not defined.**

Issue 3: Safe Cycle Lanes 8

Actions/Recommendations 9

Issue 4: Buses / Trains 91

Actions/Recommendations 9

Issue 5: Cars **12**

Lessons from other Countries **Error! Bookmark not defined.**

Transport and Infrastructure Conclusions 123

Theme 2: Food and Agriculture 12

Issue 1: Food Waste 13

Actions/Recommendations 134

issue 2: Large Scale Farming 14

Actions/Recommendations 15

Issue 3: Lack of Easily Available Local Fresh Produce 15

Action/Recommendation 16

Issue 4: The Decline of Biodiversity and Wildlife in the Countryside 188

Actions/Recommendations 188

Issue 5: Nitrate Leaching/Pesticides 199

Actions/Recommendations **20**

Lessons from other countries **20**

Food And Agriculture Conclusions **20**

Theme 3: Energy in Buildings **21**

Actions/Recommendations **Error! Bookmark not defined.1**

Issue: Prioritisation **Error! Bookmark not defined.**

Actions/Recommendations **Error! Bookmark not defined.**

Lessons from other countries 233

Theme 4: Jobs and Innovation **Error! Bookmark not defined.5**

Key Findings from Sea Change Report 245

Recommendations for Scottish and Local Governments from Sea Change Report 26

The Councils' Role **Error! Bookmark not defined.**6

Declare a Climate Emergency 267

Change Regional Plans & Priorities 267

Education, Guidance and Support for Transition 27

Powering Aberdeen **Error! Bookmark not defined.**8

Circular Economy 28

Collaboration Spaces 28

Community Hubs 29

Speed 29

Conclusions **29**

CONSIDERATIONS FOR THE COUNCIL

INTRODUCTION

Given the existential threat that climate change poses globally, and locally, it is vital that all of us play our part in acting now to drive down greenhouse gas emissions to zero and live more sustainable lives. Aberdeen Climate Action[1] undertook a series of consultation events and discussions with the public over the past months to assist Aberdeen City Council and Aberdeenshire Council in understanding where the focus of their efforts should lie in making the region more sustainable. The majority of suggestions came from a group discussion climate cafe on 4th June, 'Pathways to a Sustainable Aberdeen'[2].

Private individuals need to be assisted by government action, both globally, nationally, regionally and locally to enable them to make changes to low carbon lifestyle: Many of the choices people can make are premised on what the safe, reliable and easily accessible options are. In the discussion, it was obvious that people were heartened by the positive actions being taken by both Councils' to provide leadership on driving down carbon emissions in the North East but were concerned that there is a lack of sufficient strategic high level joined up action being taken to really facilitate and ensure a shift to a net zero carbon region.

We are fully aware that a regional policy and plan cannot simply be formed out of the suggestions put forward in this report, especially given the relatively small level and extent of consultations which formed the basis of this report. However, a recurring theme in the discussion is the need for urgent action by and real leadership to be taken by the Councils on this matter. People want a clear message that the Councils are placing climate change at the center of their decision making: They want both councils to declare a climate emergency and take urgent action to create a net zero greenhouse gas (GHG) emissions region. There was seen to be a need for a regional sustainability action plan and a mainstreaming of climate change considerations throughout all the councils' decision making, with the default choice being the low carbon option. The people of the region need you to make decisions and investments to help them make the right lifestyle choices.

THIS REPORT

This report is a compilation of suggestions put forward by the participants for the consideration of the councils, and does not necessarily constitute the opinion of Aberdeen Climate Action CIC[3].

[1] Aberdeen Climate Action C.I.C. is an unfunded, non profit, volunteer run organisation based in Aberdeen City and Aberdeenshire. Its aims are to raise awareness of climate change and prompt action, in the north east of Scotland, to reduce carbon emissions and live sustainably.

[2] https://www.facebook.com/events/412221589566349/

[3]

In the Climate Cafe, around 70 participants, working in four broad-themed working groups, discussed which actions would be useful or essential to create a sustainable North East region and what role the councils should play. Aberdeen Climate Action also gathered views from members of the public at various over events such as the Sustainable Development Goals Schools Conference at the International School in May and the Deeside CAN inaugural event on 20th June, where another 150 people took part in the consultation.

The workshop themes were:

- Transport and Infrastructure
- Food and Agriculture
- Energy and Buildings
- Jobs and Innovation

This report is based around these same broad themes. We are aware that overlap exists between the sections, it is in fact often in the overlap where actions are the most powerful, and that is also where the councils', by their siloed nature, will need to have an overall strategic plan and ensure collaboration between departments and themselves.

While it was noted at the workshop that the councils often show good intent and some valiant leadership, e.g. the Hydrogen Buses project etc., there seems to be a lack of follow-through with a lot of policies and the rate of progress and implementation is much too slow for the urgency of the change required. For example, there are still only 10 H2 buses in the city and Aberdeen is suffering air pollution at the nation's most extreme levels.

It is understood that by the nature of the process most suggestions are simplified and should be seen as "desired outcomes" rather than a full pathway to decarbonisation. Some considerations, which may reduce the negative consequences, are mentioned for information.

THE EXISTENTIAL RISK

In 2007, security analysts warned that what we know about climate change and its possible effects has been significantly downplayed by scientists[4]. Reports such as those published by the IPCC show a one-sided reliance on general climate models but exclude some of the processes that contribute to system feedback, compound extreme events and abrupt and/or irreversible changes[5]. Policy makers and the media tend not to pay so much attention to the most devastating, difficult to quantify, outcomes but rather focus on headline numbers. Even taking these headline figures into account, however, is terrifying.

The latest report by IPCC shows that we cannot let the planet warm by more than 1.5°C, even a rise of an extra half degree rise puts millions at risk of flooding, not to mention the risk posed to nature and the ecosystems within it. Pollinating insects are almost twice as likely to lose their habitats at a 2°C rise, which would be a catastrophic threat to all ecosystems. There has already been a 1°C rise in global

[4] Existential Climate-Related Security Risk: A Scenario Approach, May 2019 (available here: https://apo.org.au/node/239741)

[5] Wuebbles D.J., et al 2017

temperature and we are currently on course for a devastating rise of 3^{o}C rise, not including long-term carbon cycle feedbacks. Given the disastrous effects that a rise above 1.5^{o} would bring mass die out of species, rising water levels, more extreme weather events, mass migration and massive human deaths, famine and drought, we do not want such a rise to occur. It is in all our hands to prevent it.

BACKGROUND: THE CLIMATE EMERGENCY IN SCOTLAND

The Scottish Government is working on a new Climate Change Bill which will amend the existing Climate Change (Scotland) Act 2009. It is going through the parliamentary process at present. This year, the Scottish government and UK Parliament have declared a climate emergency. The Climate Change (Scotland) bill has, at present, set a 2045 target for net-zero emissions of all greenhouse gases[6], in line with recommendations from the Committee on Climate Change (CCC), an independent, statutory body created under the Climate Change (Scotland) Act 2009. While Scotland was on track to meet the 2009 Act target of 42% reduction of carbon emissions on 1990 levels by 2020, the interim targets were missed in 2016 and 2017. This was largely due to an increase in emissions from transport during this period. Transport, agriculture and heating are the prime areas that real action on emissions needs to be taken.

Scotland's targets are based on reducing emissions of all greenhouse gases covered by the Kyoto Protocol such as carbon dioxide and methane, among others. In practice reduction of emissions on the one hand, and the development of "negative emissions"/ carbon sinks on the other, must be done in parallel with the greatest urgency – carbon-neutrality is not the final target - reduction in the overall greenhouse gases in the atmosphere is. Negative emissions must be achieved in any areas possible, to balance regions where emissions remain.

The pronouncement of a "Climate Emergency" by the Scottish Government and UK Parliament means that a "business as usual" approach is no longer acceptable, decisions now need to be made taking their carbon impact into account. The more that is done to reduce carbon emissions now, the less painful it will be to our economy and way of life in the long term. The primary consideration in decision making must be reduction of greenhouse gases, not cost saving, although the recommendations mentioned in this report will actually lead to substantial long term cost savings.

AREAS WHERE CHANGE IS REQUIRED

This report aims to emphasise three areas, which kept recurring across all discussions and where we believe driving for change will enable the North East's transition into a sustainable region, allowing City and Shire to lead by example in responding to the current climate emergency. These three heavily interconnected areas are:

- There needs to be a shift in the hierarchy of importance in the planning process to prioritise low carbon options

[6] The Intergovernmental Panel on Climate Change (IPCC) defined net-zero emissions in their Special Report to mean that emissions of greenhouse gases going into the atmosphere are balanced by the removal of these gases e.g. carbon being absorbed by forests and soils. This is equivalent to a 100% reduction in net emissions from any baseline level.

- A necessary shift in culture to result in positive change and low carbon behaviour choices
- There needs to be an integration of change across all areas of planning and decision making to deal with the climate change emergency.

While we appreciate that coordinated action in these areas is likely to be challenging for siloed organisations such as the councils, we feel confident that, given alignment on the overall aim of reducing emissions to zero, leadership and cooperation can successfully evolve to the necessary levels.

THEME 1: TRANSPORT AND INFRASTRUCTURE

Infrastructure planning is key to increasing sustainable travel. One of the main reasons that the Scottish Government has missed its target for reducing greenhouse gas emissions, despite the declared climate emergency, is due to emissions from transport actually increasing in Scotland in 2017. Transport, alongside heating and agriculture is, Scotland's largest carbon emitter and needs to be urgently and coherently dealt with.

Key issues identified:

- Need for change in hierarchy of planning transport infrastructure to support low carbon transport
- Need to create a positive culture surrounding communal travel and 'green' travel
- There needs to be major investment in and creation of green travel infrastructure

ISSUE 1: PRIORITISATION IN PLANNING

Currently it appears that cars are placed at the top of the transport planning hierarchy. This encourages car ownership and private travel, adding to carbon emissions, while negatively affecting the efficiency, safety and reliability of green travel options. The prioritisation hierarchy has to change to place low carbon transport such as bicycles, buses and trains at the top, before cars, and so create the conditions necessary to greatly increase the uptake of such options and reap the related health and cost reduction benefits. Prioritising green travel will also initiate the necessary behavioural change, such as a shift in culture about sustainable travel, better attitude towards cyclists etc. This can be seen very clearly in those cities and regions where this prioritisation has occurred.

The International Cycling Infrastructure Best Practice Study[7] demonstrates that it is only by effective leadership and planning that cycling numbers will increase in appropriate numbers. This is the same for any mode of transport: the modes of transport that are effectively planned for will flourish: private car ownership and use needs to be discouraged not prioritised, if we are to meet our necessary net zero GHG targets and have healthy air and people.

[7] http://content.tfl.gov.uk/international-cycling-infrastructure-best-practice-study.pdf

In relation to Aberdeenshire, participants were adamant that the Council needed to develop creative, flexible collective transport solutions for those living in or travelling within rural or remote areas. There was specific mention of the need to replace the new dualled A96 plan with an upgrade of the current road and re-think other policies that are directly opposed to carbon reduction targets.

Participants were very positive about the sustainable changes to infrastructure carried out/envisioned in the Aberdeen City Master Plan and SUMP and there was widespread approval of pedestrianising Union St and the city centre. It is great to see so many sustainable infrastructure changes planned for the city centre such as the creation of segregated bike lanes, new park and ride areas, reduction of parking, cycle highways and hire hubs and bus only streets[8]. It was felt that these will bring positive change to the city in relation to cleaner air, lower greenhouse gas emissions and a better overall cultural atmosphere to the city centre. These actions and impacts, however, need to be implemented urgently, and stretch much further out than the city centre. They need to be instituted and felt throughout the whole region, at the core of all transport and infrastructure decisions: There needs to be prioritisation given to the low carbon options.

SPECIFIC ACTIONS/RECOMMENDATIONS

- Pre-existing roads should be modified to include segregated bike paths.
- Main roads should be modified to include a separate 'bus only' lane.
- Any new building development must be planned with a 'green byway' linking it to facilities, the city and the rest of the shire, where resident/ employees can scoot, cycle and walk etc, similar to the Deeside Railway line.
- Any new roads must be built with the new transport hierarchy in mind i.e. with automatically segregated bike paths, bus lane, pavements etc.
- At present there are too many empty shop lots in Aberdeen City Centre. No new city shopping centres should be allowed or enlarged, instead the priority should be in rebuilding our city centre based around Union St. Pedestrianisation is a good start but other incentives need to be considered.
- Union Street and surrounded Streets should be closed to car traffic.
- There should be a high speed train link to Edinburgh and Glasgow, i.e. electrified, and onto London.
- Increasing the number of train stations and routes in the region should be considered.
- There should not be a new dualled A96 but the existing A96 should be improved.

ISSUE 2: SAFE CYCLE LANES

During the discussion, participants were asked what would encourage them to use the bike as a main form of transport i.e. commuting to work/education etc. The overwhelming response was safe/ segregated and continuous cycle lanes. We need segregated cycle lanes on key routes into the city centre from each residential area and a pedestrianised city centre. We also need segregated bike paths between each community to enable free and safe movement, especially north to south, where there is currently a complete lack of such route, particularly in Aberdeen.

[8] **Projects EN02-7**

In addition to this, cyclists are generally afraid of drivers in Aberdeen City who, mostly, appear to regard cyclists as a nuisance and purposely drive in a manner which is intimidating and often unsafe around cyclists. This is why a shift in culture surrounding cycling needs to be made, as well as implementing the appropriate road infrastructure adjustments.

ACTIONS/RECOMMENDATIONS

The following recommendations were drawn from the climate cafe discussion:

- Implement projects from the Aberdeen City Masterplan which relate to cycle lanes[9].
- Create safe byways and segregated bike paths on most existing roads to ensure safe routes to facilitates and between communities and town centres.
- Create safe sheltered bike parking at key points and facilities.
- Provide appropriate bike ability classes to all ages
- Place cyclists, along with communal travel and other modes of active travel, at the top of the hierarchy of objectives when planning road infrastructure, this will ensure that cycling will become a safe and convenient way to travel, particularly for shorter journeys and journeys within the city.

ISSUE 3: COMMUNAL TRAVEL

There are a number of issues with communal travel in Aberdeen City and Shire:

- The cost of communal travel is high, partly due to lack of demand.
- There is a general perception that communal travel is not as convenient as private car ownership, thus driving down demand for tickets.
- The poor reliability and availability of communal travel for people who need to use it to get to work or for education etc.

ACTIONS/RECOMMENDATIONS

Actions/recommendations drawn from the climate cafe discussion, in relation to buses:

- As one of the world's few towns with H2 filling stations and buses, Aberdeen has made a great start. However, there are still only 10 buses, the vast majority of buses are still carbon reliant, and the H2 fleet does not seem to be expanding. The H2 bus fleet needs to be expanded and a hydrogen bus network established across the region. Help should be given to local companies or organisations that wish to help do this, alongside continued major council investment.
- There should be dedicated bus lanes on all major bus routes to the city centre and between communities to speed up journey times and make bus transport more reliable, quicker and more pleasant than car travel. This will encourage the use of buses and will hopefully drive down ticket price as demand increases.

[9] EN03, EN05, IN03 - IN05

- A re-nationalisation of local buses and a unified transport authority between the city and shire should be instituted. It can be seen that nationalized bus services, as in Edinburgh, are more inclusive, cheaper, and reliable. Profit and the need for public transport for all does not mesh!
- Bus routes need to be revisited to include routes between communities not just a radial approach to city centre, especially north to south.
- Bus prices need to be reduced to encourage the use of green transport. This can only happen, however, if the infrastructure, pricing and ownership changes outlined above are put into action to make bus use cheap, easy, quick and reliable. Edinburgh is a good example of how a public authority can successfully manage this.
- There needs to be more streets with bus and cycle only access. This will provide better quality air in the city centre as well as a more appealing atmosphere for Aberdonians as well as tourists and visitors.

Actions / recommendations related to trains:

- A high speed train link/ electrified lines should be built to Edinburgh and Glasgow as a minimum, London at best, to divert people from plane use.
- There needs to be more thought given as to how all transport t modes link up to ensure effortless, quick and reliable public transport linkage. More needs to be done to publicise combined rail and bus tickets and the grasshopper ticket.
- Trains need to be more reliable and cheaper - renationalising here is also key. The perception is that trains are always getting cancelled or delayed and therefore unreliable, and they are expensive. As long as rail tickets are most costly than the obvious car costs, private cars will win out.
- A trolley bus/tram type system should be researched for utility, particularly in the city centre. In days of Hydrogen, overhead cables may not be required and short distance transportation methods need to be considered in line with pedestrianisation.

CARS

- There is a need for better car charging infrastructure, addressed in a holistic fashion, so that fast chargers are in suitable, regular spaced locations and people are able to buy an electric or hydrogen car confident that they are able to drive it wherever they need to.
- There needs to be a way for people with on street parking can charge their cars outside their houses.
- The Park and Ride car parks were felt to be too close to town and should be further out to maximise the gains of having such a resource.
- The need for a congestion charge in Aberdeen City Centre was also mentioned.
- There should be investment into R&D of autonomous cars.
- There should be car exclusion zones around all schools and a no idling by-law created and enforced. There is too much air pollution and congestion around many schools. It was suggested to have a mandatory car free zone (e.g. 1 mile) around all schools with a walking bus system from designated “park and stride” areas etc. This could be enforced by wardens who can issue fines/report vehicles for breaking regulations on car idling. This would effectively tackle the issue of car idling during peak times, which creates unnecessary traffic congestion, and pollutes

the air. There is currently a successful walking bus in operation in Cults Primary School[10] in Aberdeen and Fraserburgh in the Shire that could be rolled out throughout the region. Several Scottish Councils have done school exclusion zones pilot schemes i.e. Edinburgh, East Lothian, Clackmannanshire and Perth and Kinross[11].

- The councils should stimulate the taxi fleets to become low carbon taxis, using electric or hydrogen energy, by the use of incentives and licensing regulations.

ISSUE: NECESSARY CULTURE SHIFT

Currently people feel unsafe using a bike as their main mode of transport/ commuting. This will only change when the infrastructure and laws do and create an actual and perceived safe way of travel, as described above, but alongside the physical changes there needs to be an effective education campaign undertaken by the councils' on the need for and benefit of the change in hierarchy and to persuade people out of private cars and into 'green transport'.

At present, private vehicle drivers' attitudes towards cyclists can be quite hostile or simply show a lack of care. A substantial number believe that roads are for cars and cyclists are a nuisance. This can change through education and awareness raising but will be prompted by a change in infrastructure.

There is no presumed liability in UK law, which creates a dangerous and hostile environment for cyclists, further discouraging people from cycling regularly. This law needs to be changed to one of strict liability on the part of vehicle drivers, if in an accident with a pedestrian or cyclist, as is the case in the Netherlands[12].

Additionally, the attitudes of the general public with regard to public travel such as buses or trains is quite negative. Car ownership is perceived to be easier and more convenient as public transport is felt to be expensive, unreliable and not frequent enough. Once the changes have occurred to make public transport cheaper, more accessible, cleaner, frequent and reliable, this needs to be effectively communicated to the public.

LESSONS FROM OTHER COUNTRIES

THE NETHERLANDS

Cluster City Infrastructure

The Netherlands is a great example to look to with regard to reliable and sustainable transport infrastructure. It is a relatively small but densely populated country and despite being a prosperous

[10] www.cultsprimarywalkingbus.uk

[11] https://www.pkc.gov.uk/schoolexclusionzone; http://www.streetsaheadedinburgh.org.uk/streetsahead/info/35/school_travel/87/school_streets

[12] https://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=2176&context=ealr at p486-90

country, car ownership is below the OECD and EU average, as well as being below its neighbouring countries; Belgium and Germany.[13] This is because more people use communal means of transport, reducing the carbon footprint per person because it is quick, cheap, regular and reliable.

There are more bicycles in the Netherlands than there are people, and they account for almost half of all work commutes in Amsterdam alone. Undoubtedly, the country's landscape is notoriously flat, which makes cycling easier and more appealing. Another bigger factor, however, is the wide availability of cycle paths and lanes which keep cyclists separated from vehicular traffic. The Dutch government also offers tax credits to incentivise people to get on their bikes, in a similar way that companies may allow their employees to claim back expenses from driving a car. Every kilometre cycled could earn you an extra €0.22 in your paycheck and this is tax free.[14]

TRANSPORT AND INFRASTRUCTURE - CONCLUSIONS

The point we would like to stress the most is that making travel more sustainable in Aberdeen City and Aberdeenshire is not and cannot be down to just one solution. A holistic approach needs to be taken and an implementation of solutions in every area we discussed. There are some praiseworthy initiatives, some of which we have identified as already being in the Aberdeen City Masterplan and SUMP, that need to be implemented with sustainability at the forefront of that implementation. These, being concentrated on the City Centre only, are not however enough. The sustainable concept behind them need to at the core of each transport decision.

Another core objective must be to initiate a shift in culture: we are in a climate emergency, reducing our carbon footprint and minimising pollution must be the absolute norm, not something which can be done when it is convenient to do so. The North East needs to lead by example in how we respond to this climate emergency, attracting green investment, and other cities will follow suit.

THEME 2: FOOD AND AGRICULTURE

Key issues:

- Too much food waste is going into landfills, with the resultant release of methane, loss of nutrients, wasted production and transport footprint, cost.
- Large scale farming is driving up CO2 emissions
- Lack of easy availability of local fresh produce
- Decline of biodiversity and wildlife in the countryside
- Nitrate Leaching/pesticides

[13] https://www.itf-oecd.org/sites/default/files/docs/stead.pdf

[14] https://www.weforum.org/agenda/2019/02/the-netherlands-is-giving-tax-breaks-to-cycling-commuters-and-they-re-not-the-only-ones/

ISSUE 1: FOOD WASTE

There are a number of problems with food waste entering landfills:

- Nutrients are lost;
- High financial cost;
- Releases methane into the atmosphere.

According to Aberdeenshire Council, over 21.8% of waste in its landfill site is food waste, often in its original packaging, making it even more difficult to biodegrade in a way which is not harmful to the environment[15]. Not only does food waste cost a lot of money, it is also extremely damaging to our planet. When food waste goes into landfill, it does not have enough access to oxygen to safely biodegrade. Instead, it rots and decays releasing methane into the air, a gas which is more damaging to our planet than carbon dioxide.

ACTIONS/RECOMMENDATIONS

There needs to be more education and publicity campaigns on the need to recycle food waste and also how to do without packaging. The Councils could enter into a contract with Keenans to recycle the current packaged food waste; Keenans already do this for commercial customers.

Additionally, there was a desire from the participants for community composting schemes to engage people and retain the compost locally for domestic and community use, reducing transport costs and making 'grow your own' cheaper and easier. It would also reduce the use of peat based composting, which would help keep our natural carbon sinks in good health.

Commercial Composting Firms:

Keenans does a great job of recycling local food waste into compost but they only create so much compost and, while that is used by local farmers, the size of Aberdeenshire means that not all farmers can get compost through Keenans. There should be encouragement by the councils to create more local commercial composting businesses in each part of the shire. Additionally landowners should be encouraged and incentivised to make their own compost, or at the very least, give their organic waste to a composting facility.

Community Composting:

The term community composting covers a wide range of activities and can take place at many levels. Large -scale centralised facilities can serve wide geographic areas and divert significant quantities of organic materials from disposal. When done at neighbourhood or community level, composting yields many benefits:

- social inclusion and empowerment
- greener neighbourhoods
- improved local soils

[15] https://www.aberdeenshire.gov.uk/waste/landfill/

- enhanced food security and fewer food deserts
- less need and use of waste lorries and collection saving costs
- more local jobs
- increased composting know-how and skills within the local workforce that is reinforced in the next generation.

Aberdeen City and Shire Councils could organise community composting schemes like other councils in Brighton & Hove and Suffolk[16], to bring communities together and allow them to become self reliant and sustainable. This will help reduce the amount of food waste entering landfills, thereby saving money, and in turn reducing the amount of methane which is released into the atmosphere. In addition, it is a great way to reinforce a sense of community, educate the residents and hopefully encourage them to pass on these skills to future generations.

Enterprise Cafes

Social enterprises are compassionate businesses that drive social or environmental impact through their business activities. We would like the Councils to support such cafes, with their emphasis being on reducing waste and the ecological footprint of the food system locally. By running these "cafes-with-a-conscience" Aberdeen and the Shire can promote its diverse food economy and provide a more sustainable food procurement opportunity, linking into the need for small scale sustainable food producers to find a local market for their produce. Working in conjunction with the Sustainable Food Cities initiative, to provide spaces for these enterprise cafes, you can help educate the community on food waste and boost the awareness of local produce and any community growing projects.

ISSUE 2: LARGE SCALE FARMING

The North East accounts for 16% of Scottish agricultural area but retains big shares of production: almost half the crops, third of cattle, two thirds of pigs and a quarter of beef cows. Crops account for around half of the value of output - even higher once the value of grain grown for feeding on farm is added[17].

In order to supply our population with sufficient nutritious food, we need to start making changes to our farming policies and ways. Large scale industrial farming is creating less productive land: Without traditional crop rotation or grazing to build soil fertility naturally or break weed, disease and pest cycles, farmers invariably resort to using a higher level of chemical pesticides and fertilizers. This has had a devastating impact on soil health, biodiversity and the quality of food. According to the Campaign to Protect Rural England (CPRE) report, New Model Farming[18], a third of UK farms less than 50 hectares have been lost between 2005 and 2015. In stark contrast, the number of farms above 100 hectares is on the rise. This is driven, to a large extent by the fact that supermarket price 'wars' have driven down the cost of food to the extent that small scale farm costs cannot even break even. Small scale farming

[16] https://bhfood.org.uk/directory-hub/community-composting/

[17] The Land Based Sector in NE Scotland facing the future Report, 2016 https://www.aberdeenshire.gov.uk/media/15921/land-based-sector-web.pdf

[18] 2016, https://www.cpre.org.uk/resources/farming-and-food/farming/item/4347-new-model-farming

though is much better for the health of the land, rural employment, biodiversity and animal welfare. They are in a position to address some of the most pressing environmental, social and economic issues faced by rural areas, whilst providing adequate quantities of fresh and high quality food. There are also needs to be local food sold locally to reduce food miles and increase the health of the local economy.

ACTIONS/RECOMMENDATIONS

The following recommendations were drawn from the climate cafe discussion:

- Measures which encourage farmers to use sustainable / best practice methods should be encouraged and promoted by Aberdeenshire Council. For examples see: https://www.conserve-energy-future.com/sustainable-farming-practices.php and What Is Next for Farming report[19].
- Encourage start-ups of small scale farmers, with advice, grants and subsidies, as small scale farmers use less co2 emissions and best practice methods are e more easily instituted.
- To encourage small scale farming and smallholding there needs to be an easy low cost way for them to get their produce to market/ consumers. The councils need to encourage the growth of greengrocers and also investigate the best model for enabling this to happen i.e. covered permanent food market in Aberdeen, mobile fresh produce van, more farmers markets etc.
- Given the need to dramatically reduce our meat eating/ animal farming there should be incentives given to help farmers switch from livestock to crops[20].
- There also has to be an increase in small scale local abattoirs in the Shire to enable and encourage responsible ethically managed livestock farming.
- The councils should also put pressure on Central government to establish food boards that can 'defend' reasonable prices for food and push back on the 'drive to the bottom' approach of supermarkets.
- The Councils could buy local fresh produce locally for use in school meals. In addition, they should reduce the amount of meat, especially red meat, in school meals and have more vegetarian only days and vegan options as standard.
- Councils should have an advice centre for people who wish to have a small scale farm/ smallholding.

ISSUE 3: LACK OF EASILY AVAILABLE LOCAL FRESH PRODUCE

Currently Aberdeen City offers a farmer's market on Belmont Street once a month on the last Saturday of every month and a few other producer markets on Thistle St and George St. Aberdeenshire has many more local farmers markets[21]. While this is a great way to get fresh produce directly from farmers, and

[19] https://www.wildlifetrusts.org/sites/default/files/2018-03/What%20next%20for%20farming%20-%20a%20future%20policy%20for%20land%20in%20England%2C%20investing%20in%20our%20natural%20assets.pdf

[20] See 'Eating Away at Climate Change With Negative Emissions report, Helen Harwatt and Msathew Hayek, April 2019, Animal Law & Policy Program Harvard Law School', http://animal.law.harvard.edu/wp-content/uploads/Eating-Away-at-Climate-Change-with-Negative-Emissions%E2%80%93%E2%80%93Harwatt-Hayek.pdf

[21] https://www.aberdeenshire.gov.uk/business/support-and-advice/industry-sectors/agriculture-and-rural-development/farmers-markets

allows fresh produce to be purchased with less packaging, it is not regular or convenient enough. Having it once a month, and on a weekend day makes this extremely inaccessible to most people, particularly those who work weekends. There is a cause-effect relation between urbanization and the growing physical and social distances between producers and customers. Recent studies confirm that farmers markets have the potential to reduce these physical and social distances between producers and consumers, and consequently, enhance the sustainability of local food production[22].

ACTIONS/RECOMMENDATIONS

Regular Farmer's Markets

We can look to cities in the Netherlands as an example. Most cities (Amsterdam, The Hague, Groningen and more) hold regular farmer's markets in their city centres' 3-4 times per week, making it accessible to people with all types of schedules, ensuring that they can regularly purchase fresh local produce, with less plastic packaging, and of course the farmer's receive financial benefit from this. This type of produce, in the Netherlands, is cheaper than the equivalent at the supermarket meaning that healthy and fresh food can be made available to those who may not be able to afford fresh vegetables from supermarkets.

The pedestrianisation of Union Street, and other areas of the city centre would provide an ideal space for regular farmer's markets to take place. Most older towns and villages in the Shire have a market square or place where markets used to take place. These spaces could be reused again for fresh produce markets. These markets also have the potential to achieve major social benefits through enhancing community interaction and community building.

Please also see the previous section recommendations in relation to facilitating the development of a closed fixed local produce market open throughout the week, at least in Aberdeen City and other major towns.

Community Food Growing:

The Community Empowerment (Scotland) Act 2015 requires each local authority to prepare a food-growing strategy for its area to identify land that may be used as allotment sites, identify other areas of land that could be used for community growing, and describe how the authority intends to increase provision for community growing, in particular in areas which experience socio-economic disadvantage. While preparing such a food-growing strategy we would like each authority to:

1. **Take steps to make food growing opportunities available to all residents of the North East to improve their health and wellbeing**.

- *Political & Strategic*: Communities and politicians will understand the link between healthy people, good, local food and a high-quality environment in and around the city and shire.
- *Governance*: Coordinate action planning with the sustainable food city partnership. Consider the appointment of a food-growing champion and a food-growing facilitator.

[22] Kjartan Åsebø and others, 'Farmer and Consumer Attitudes at Farmers Markets in Norway' (2007) 30 (4) Journal of Sustainable Agriculture 67. https://www.tandfonline.com/doi/abs/10.1300/J064v30n04_06

- *Support and skills*: People in the city will know where to go to receive support and help to start their food growing journey.
- *Mapping and info*: Have a clear understanding of the spaces available for food growing.
- *Schools*: provide a school growing space for all wishing to have one. Provide support to sustain food-growing activities and embed into curriculum.
- *Using public estate*: get more food-growing into prime locations.
- *Research*: support research on local food-growing measures
- *Secure funding*

2. **Help to alleviate food poverty and raise awareness about the benefits of food growing to mental and physical well-being, through public engagement and encouraging the uptake of food-growing opportunities.**

- Encourage not-for-profit social enterprise through the availability and encouraging uptake of food-growing opportunities.
- Make food-growing visible in and around the North East: public parks, amenity land, on walls and roofs. Participants were enthusiastic about the use of 'incredible edible' projects throughout their common spare space in bits of unused land.
- Share skills and culture through programmes facilitating sharing of cookery skills and food-growing knowledge.
- Set up a 'social prescribing programme' where food-growing is offered on prescription by GPs.

3. **Encourage biodiversity and climate resilience and reduce carbon mileage through providing opportunities for local production of food and through appropriate site design.**

- Enable local food-growing into the work of the Sustainable Food City Partnership Aberdeen to involve local businesses and supermarkets and support local restaurants to use seasonal and locally grown produce.
- Embed requirement to increase biodiversity and climate resilience within growing spaces through choice of plants, heritage varieties, site design and management. Esp. consider spaces and food for bees. Encourage gardening in general.
- Encourage locally-grown fruit and veg be supplied and served by the public sector wherever possible.
- On-site composting where appropriate.

4. **Make all of Aberdeen's allotment sites and food-growing spaces well managed community empowered sites with quality facilities, as far as is practicable**

- Make supply of allotment sites and food growing spaces transparent to all
- Extend the use of micro plots to grow gardening skills and engage with the allotment waiting list.
- Create a culture where communities feel supported and encouraged to grow food on land.

5. **Take steps to allow the local economy to benefit from local food-growing**

- Encourage local fruit and veg to be specified, supplied and served by the public sector
- Explore links to tourism by developing a food trail or having an annual food-based event
- Encourage not-for-profit social enterprise through the availability and encouraging uptake of food-growing opportunities
- Support and encourage locally-based food-growing businesses
- Involve businesses and supermarkets in food-growing, and support local restaurants to use seasonal and locally grown produce on their menus.

ISSUE 4: THE DECLINE OF BIODIVERSITY AND WILDLIFE IN THE COUNTRYSIDE

The decline of wildlife in the countryside threatens our future ability to grow food. The recovery of wildlife depends on farming policies that enable farmers to create and restore natural habitats alongside food production. It also depends, in more urban areas, on the utilisation of existing green spaces to provide a natural habitat for beneficial invertebrates and pollinators, such as wildlife verges, unmown grass areas and replacing the use of pesticides and nitrates with compost and companion planting.

We are experiencing a mass die off of species at an alarming rate with a 2018 WWF report showing that population sizes of wildlife decreased by 60% globally between 1970 and 2014[23]. As Sir Robert Watson, Chair of IPBES, states ""biodiversity and nature's contributions to people sound, to many, academic and far removed from our daily lives. Nothing could be further from the truth – they are the bedrock of our food, clean water and energy. They are at the heart not only of our survival, but of our cultures, identities and enjoyment of life. The best available evidence, gathered by the world's leading experts, points us now to a single conclusion: we must act to halt and reverse the unsustainable use of nature – or risk not only the future we want, but even the lives we currently lead. Fortunately, the evidence also shows that we know how to protect and partially restore our vital natural assets."[24] The May 2019 global assessment report on biodiversity and ecosystem services of the Intergovernmental Science -Policy Platform on Biodiversity and Ecosystem Services[25] shows that the biomass of wild mammals has fallen by 82%, natural ecosystems have lost about half their area and a million species are at risk of extinction – all largely as a result of human actions. This is terrifying news but the silver lining is that we can change it around and prevent further loss and degradation through our actions now and in the future.

ACTIONS/RECOMMENDATIONS

- Undertake a survey of biodiversity in the City and Shire to determine what state our wildlife is in and see how they connect and what we can do to 'fix' the issue culminating in a Biodiversity Action Plan.
- In relation to the councils' own internal behaviour, all public land to be managed to support and encourage biodiversity i.e. wildflower verges along roads, unmown, 'wild' parts of parks, planting of orchards and hedgerows on public land, having incredible edible projects on spare land in urban areas and, most importantly, stopping the use of pesticides.
- Continue to support and encourage the development of community gardens and allotments.
- Only give planning permission to new buildings and developments if there are biodiversity measures built in such as: swift nesting box bricks, mini orchards, ponds, communal vegetable plots etc. Some of these measures can be seen in the Countesswells development in Aberdeen City but more can be done to put such binding obligations on developers.
- Undertake education of and working with local landowners, managers and farmers so that they employ nature friendly farming actions such as using green manure, rotating crops and leaving some land fallow, having hedgerows, wide verges around crops etc.

[23] https://www.theguardian.com/environment/2018/oct/30/humanity-wiped-out-animals-since-1970-major-report-finds

[24] https://www.ceh.ac.uk/news-and-media/news/ceh-scientists-contribute-global-biodiversity-assessments

[25] https://www.ipbes.net/global-assessment-report-biodiversity-ecosystem-services

ISSUE 5: NITRATE LEACHING/PESTICIDES

Nitrate is essential for plant growth and occurs naturally in soil but it is also supplied in chemical fertilisers, livestock manures and slurries and often organic materials spread on land. The loss of nitrogen compounds, such as nitrates can cause pollution where they enter watercourses or groundwater, posing a threat of eutrophication of the water environment. This can have serious long-term effects, the most notable one being algal blooms which can cause wide-spread death to life in the water if it is too abundant, causing organisms that die to sink to the bottom and start to decompose.

To reduce the quantity of nitrates lost through leaching, it is important that applications of fertiliser are closely matched to crop requirements. The quantity of nitrogen already available in the soil through deposition from grazing animals, crop residues and from any applications of manure or slurry, needs to be taken into account.[26] The Sustainable Soils Alliance was recently launched with the aim of bringing UK soils back to health within one generation. It notes that farmers need to be incentivised to tackle both loss of soil fertility and decline in biodiversity. Sheffield University researchers have warned that UK farm soils only had 100 harvests left in them, which is very disturbing and needs to be tackled. There is a need to reintroduce grass and grazing animals into arable crop rotations. Systems with cattle or sheep at their core are able to remain highly productive, repair degraded soils and avoid the GHG emissions associated with the manufacture of nitrogen fertiliser, equivalent to about 8 tonnes of CO2 for every tonne of nitrogen used. Nitrogen pollution from fertiliser is estimated by scientists to be 2-3 times higher than the commercial benefits farmers get from using nitrogen fertiliser. The use of pesticides can have negative impacts on the wider environment, affecting non-target organisms and aquatic ecosystems. Ground and surface waters are vulnerable to pollution by pesticides and can raise concerns for public health where supplies are used for drinking water. Even small quantities of pesticides can result in a significant pollution event e.g. from drips and spills on to concrete at farms. This can result in pollution if they are washed into farm drains or watercourses.[27] The use of pesticides can be reduced/ stopped by the use of natural methods such as crop rotation, companion growing, green manure and the use of compost.

ACTIONS/RECOMMENDATIONS

The following recommendations were drawn from the climate cafe as well as external research:

- encourage farmers to calculate how much fertiliser is actually needed (taking into account natural fertilisers in the soil already present, fertiliser from manure etc
- encourage farmers to use a range of counter-measures such as catch crops, minimum tillage, control of biological processes etc.

LESSONS FROM OTHER COUNTRIES

[26] https://www.sepa.org.uk/regulations/land/agriculture/sector-specific-issues/

[27] https://www.sepa.org.uk/regulations/land/agriculture/sector-specific-issues/

FRANCE

In 2016 the French government introduced legislation requiring supermarkets to re-distribute leftover food to charities as part of a set of proposals published in 2015 against food waste. France is also undergoing development of a new agroecology policy, which aims to shift agriculture towards the objective of combining economic, environmental and social performance. The plan places emphasis primarily on training for farmers, mobilisation of research and development, creation of an agroecological self-assessment tool, renewal of public support and implementation of regular monitoring and evaluation. The ministry estimates that by 2025 most farmers in France will sign on to this concept, which includes practices like rotating crops to improve soil fertility and cutting reliance on chemical fertiliser.[28]

FOOD AND AGRICULTURE CONCLUSIONS

The food waste problem needs to be tackled with encouragement from local authorities of practices like community composting. Food shops, supermarkets and restaurants and cafes should also be encouraged to donate their unsellable food to community composting enterprises to prevent such large quantities of food from entering landfills.

Large scale farming can be tackled by financially encouraging start-ups for small farmers, and also by encouraging financial rewards for using best practice methods discussed previously in the report. We also need regular farmer's markets to bring in cheaper fresh produce which is not covered with plastic packaging, and making this more easily accessible to all types of people. Community food growing is also a good way to bring in fresh produce into Aberdeen and shire communities.

THEME 3: ENERGY IN BUILDINGS

Some of the main issues with energy in buildings were identified as:

- Insufficient action taken at local and national level to reduce energy use, switch to low carbon energy and ensure top insulation levels in new and existing building stock.
- Energy in buildings account for 37% of UK energy use, with 20% being used for domestic buildings.
- Reduction in energy use in UK buildings has only been 1.2% per year over the last 10 years.
- In Aberdeen and Aberdeenshire, it is estimated that 100,000 traditional granite houses need energy upgrading, but would fail green deal requirements for payback in 10-12 years.

[28]https://www.reuters.com/article/us-global-food-index/france-is-most-food-sustainable-country-u-s-and-u-k-faltering-report-idUSKCN1NW0X7

- Most homes have a gas central heating system and are therefore reliant on fossil fuels, without any practical cheap alternative.

ISSUE: PRIORITISATION

In relation to the supply and use of energy in buildings, the current planning process prioritises the private profit of building companies over the affordable and effective use of energy for the building owner. Reducing greenhouse gas emissions, and dealing with the climate emergency, needs to be at the top of the hierarchy of factors in the planning permission decision making process. Priority needs to be given to ensure that not only are new buildings built to the best energy specifications, and are energy self sufficient, but also that existing stock is upgraded accordingly.

ACTIONS/RECOMMENDATIONS

Potential actions by Local Authorities

ENERGY RATING

- Every building in the region needs to have their energy rating improved to at an A rating, unless physically impossible. This must be encouraged and incentivised by government, local and national. There is a great deal of engineering expertise in the North East, which could be utilised to improve the energy efficiency of buildings, especially old building stock.
- Requirements for landlords to publish their EPC ratings for their buildings[29]. Landlords should be required by the Councils to publish their properties EPC on any website or letting agent publicity material.
- All commercial and public buildings, regardless of floor area, should be required to publish their EPC and energy use (kWh/m2/an) in their entrance. They should also show a graph of year on year reductions in energy use.[30]
- Planning applications for new buildings must meet EPC A ratings and have suitable renewable energy mechanisms, such as solar panels, as standard to meet at least 50-75% of average household energy needs.

EDUCATION AND ADVICE

- The creation of one-stop advice centres with advisors that have real practical building expertise, to help homeowners to decide on action to reduce home energy use and increase comfort.

[29] This a current legal requirement to provide to tenants prior to letting but it appears that not many people know of this – so it needs better communicated and enforced and thought given to where and how it is 'published'. The EPC rating is also being progressively increased so that it must achieve a set level which if not already E will be shortly and will increase periodically, B is the final goal for legacy homes. The public also needs more info and guidance on this and the financial incentives need to be in place to ensure it happens at the right speed.
[30] This is seemingly an actual requirement now but, again, it is not known and seen so needs to be in a more prominent public place and more attention drawn to it.

Homeowners need somewhere, easy to access, that they can go to get advice from tradesmen and experts on the optimum refurbishment for their home to reduce energy use and costs. While SCARF is supposed to do this, most of their staff are not experienced enough to give detailed technical advice. In addition, the range of government support available is too wide and thinly spread and constrained by restrictions, e.g. Green deal, resulting in their usefulness being severely limited. If the one stop shop were linked to the Demonstration house project, see below, more meaningful advice would be available.

- The creation of a demonstration house, using cutaway insulation features to showcase possible insulation, draught proofing and heating options to tie in with the one-stop advice centre. In order to work properly a demonstration house needs to have cutaway sections so that people can actually see what is going on behind the plasterboard, roof, floor, ways etc. People need to be able to see different approaches to insulation, mechanical ventilation systems etc. actually in practice. They also need this to be combined with assessments of potential home energy use reductions due to refurbishment measures taken. The house needs to have all the different renewable energy technology on show too - ground source heating, air to air, solar and pvc panels, wind etc. There needs to be involvement of building surveyors, architects, and engineers, to decide on best practice and people with those skills doing tours of the building. This would also hopefully resolve the present conflicts between Scarf, tradesmen, Historic Scotland and building specialists on the use of Kingspan and permeable insulation materials. The project could be instigated by the Councils with funding from Government and elsewhere.
- The Council should do more outreach meetings to encourage homeowners to improve the energy efficiency of their properties.

FACILITATE COLLABORATION

- Tenement flat owners/ tenants should have a way to work together to improve the energy efficiency of the building as a whole and, install renewable energy for the benefit of all. Web based templates should be developed by the Councils so that tenement owners can easily form groups, to do joint work on energy refurbishment of their buildings, install CHP, heat pumps, or install solar panels etc.
- Most actions on causes such as “energy conservation” only take root if there is group involvement and pressure. Street by street energy groups should be enabled, utilising web templates, to encourage homeowners to improve the energy efficiency of their homes.

COUNCIL SPECIFIC

- Each Council needs to consciously put each decision they make through the ‘low/lowering carbon emissions test’ and should clearly state in its opening sentence relating to any such actions that the action is required to minimise climate change or why it cannot.
- Each Council needs to look at ways to make alternative heating options cost effective, efficient, safe and low carbon.
- All public buildings need to have a maximum temperature level of 19% to reduce energy use and be able to be locally controlled to enable the switching off of heating when not required.

Potential actions by Central Government

- *VAT on refurbishment materials for buildings* - VAT should not be payable on materials used for energy refurbishment of buildings, in the same way as it is not payable on new building construction.
- *Planning applications* - Applications for new housing developments should meet EPC A ratings and have suitable renewable energy mechanisms, such as solar panels, as standard to meet at least 50-75% of average household energy needs.
- *Tenant's rights to energy efficient homes* - As in Germany, tenants should be able to demand that their landlords improve the energy rating and comfort of their property and be fined if they do not do so.
- *Green deal* - The Green deal should be reinstated with government grants rather than loans and requirements for payback times greatly extended.
- *Energy refurbishment on sale of homes* - When homes are sold, if their EPC rating is not up to its potential highest level, the seller should either have to upgrade it before sale, or the buyer should be required to put money into an account which would be used to bring it up to the relevant standard.
- *New Heating Systems* - Ban the selling and use of new gas heating systems and look at ways to make alternative heating options cost effective, efficient, safe and low carbon.

LESSONS FROM OTHER COUNTRIES

DENMARK

In Copenhagen and the surrounding towns, it is extremely rare to find homes using boilers. Instead, pipes come directly into homes from a heating network which serves the entire area, as part of one of the world's largest district heating systems. 97% of homes are heated by waste heat from a power plant or waste incinerator in the district.[31] This is an excellent way to make use of heat which would otherwise be wasted - saving both money and damage to the environment.

GERMANY

Germany is home to the invention of the Passive House (Passivhaus): a rigorous, voluntary standard for energy efficiency in a building, which dramatically reduces the building's ecological footprint. It results in ultra-low energy buildings that require little energy for space heating or cooling. This standard is used for all types of buildings, ranging from residential to office buildings, supermarkets and schools. The energy use of passivhaus is, at the maximum, 15kWh per m2 surface area for heating and 60 kWh total domestic energy consumption per m2, which includes electricity and cooking. This is about 1/5 of the energy usage within an average house.[32]

[31] https://www.holyrood.com/articles/inside-politics/analysis-scotland-still-relies-fossil-fuels

[32] For more information see:
http://passivhaustrust.org.uk/UserFiles/File/Why%20choose%20Passivhaus%202013%20FINAL.pdf

THEME 4: JOBS AND INNOVATION

A JUST MANAGED TRANSITION

The North East's economic prosperity is currently reliant on the oil and gas industry. A Climate Emergency has been declared by the UK Parliament and Scottish government. The current Climate Change (Scotland) Bill has a net zero greenhouse gas emissions target of 2045. It is an insufficiently accepted fact that we cannot reach net zero greenhouse gas emissions if the government, local authorities and businesses continue to have as an aim, and reality, the maximisation of oil and gas extraction in the North Sea. In light of this, and dwindling North Sea carbon reserves, the region needs to, as a matter of priority and urgency, create a regional transition plan and implement it without delay. In order to maintain a buoyant local economy, there needs to be a managed just transition from a region dependent on oil and gas to one to one reliant on not just one industry, but many. The skills, knowledge, technology, experience, infrastructure and finance found in the carbon industry would, however, be a good fit for the renewables and clean tech industry.

As a region we need to develop a suitable alternative industry, which can run alongside the oil and gas industry and workers and companies can easily transition into to prevent a regional 'brain drain' and economic decline. The focus of economic support must be in supporting the development of a renewable energy and clean tech economy here in the North East. This would mean that when the extraction of oil and gas in the North Sea stops, and decommissioning comes to an end, we have a maturing industry to take its place. It is common sense! The more unplanned its demise, the more decommissioning work will need outsourcing, exporting the associated jobs and skills, and the taxpayers money with it, and the more negative, the impact will be on the North East's economy. Companies operating in the North East, within the oil and gas industry, need to start transitioning into producing and supporting cleaner and renewable sources of energy and clean tech advances now. They need, however, encouragement to do so from the central and local government. Continuously investing in, and supporting, the oil and gas industry is not the way to achieve this. Westminster, Scottish government and Local Authorities have to pull together and work with a consortium of stakeholders to plan such a managed transition immediately. This is an opportunity to transition from a oil-price dictated boom-bust economy to a stable decommissioning economy, of limited duration, while building up the stable long term green tech economy. Our region is at grave risk of rapid economic decline if a managed just transition is not planned for and implemented as a matter of priority.

KEY FINDINGS FROM SEA CHANGE REPORT[33]

The UK Offshore industry employs 30,000 direct workers, with 70,000 more in the domestic supply chain. Over the last 20 years, there have been failures in drafting and implementing an energy transition policy. This has meant that opportunities to build a local strong renewable energy sector, with the requisite job creation, have been lost. These opportunities have gone to overseas

[33] https://foe.scot/home/sea-change-graphic-2-flipped/

competitors. Now that there is finally some support and growth in offshore wind projects here in the North East, the growing offshore wind power sector is characterised by a lack of trade union recognition and challenging working conditions.

The Sea Change report finds that:

- The UK's 5.7 billion barrels of oil and gas in, already-operating oil and gas fields, will already exceed the UK's share in relation to Paris climate goals. Industry and the government however aim to extract 20 billion barrels, which would put us over a 2° rise in global temperature;
- Recent subsidies for oil and gas extraction will add twice as much carbon to the atmosphere as the phase-out of coal power saves;
- Given the right policies, job creation in clean energy industries will exceed affected oil and gas jobs more than threefold.

Friends of the Earth have stated that, given the tightness of remaining carbon budgets, each new license, permit or tax break for oil and gas pushes the UK further towards a deferred collapse path - i.e. continuing to pursue maximum extraction by subsidising companies and encouraging them to shed workers, until worsening climate impacts force rapid action to cut emissions globally. If this occurs, the UK oil industry will collapse, pushing many workers out of work in a short space of time. It is an 'off a cliff edge' scenario we all want to avoid. Instead, the Sea Change report recommends a managed transition, which would require the government to stop approving and licensing new oil and gas projects and begin a phase-out of extraction. This would go hand in hand with a Just Transition for workers and communities, negotiated with trade unions and local leaders, in line with climate change goals, while building quality jobs in a clean energy economy.

Local manufacturing and workforce participation need to guide new approaches to economic development, industrial policy and ownership, together with stronger trade union rights for workers affected by energy transitions, including union recognition and sectoral bargaining to ensure acceptable norms on pay and working conditions.

Sea Change Report recommendations that the UK and Scottish Governments:

- Stop issuing licenses and permits for new oil and gas exploration and development and revoke undeveloped licenses;
- Rapidly phase out all subsidies for oil and gas extraction, including tax breaks, and redirect them to fund a Just Transition
- Enable rapid building of the clean energy industry through fiscal and policy support to at least the extent they have provided to the oil industry, including inward investment in affected regions and communities;
- Open formal consultations with trade unions to develop and implement a Just Transition strategy for oil-dependent regions and communities.

RECOMMENDATIONS FOR SCOTTISH AND LOCAL GOVERNMENTS (SECTION 8, "SEACHANGE" REPORT)

INVESTING IN THE CLEAN ECONOMY:

- Create public financial mechanisms - including national and regional investment banks - at sufficient scale to invest in industries crucial for the transition.
- Set up public investment companies - and enable existing ones - to develop renewable energy and energy efficiency projects
- Support oil and gas supply chain companies to diversify into compatible sectors such as offshore renewables, heating, water treatment etc.
- Upgrade ports to enable supply chains for large-scale offshore renewables and decommissioning to develop
- Initiate national energy efficiency retrofit programmes
- Carry out a review of the energy system to identify which parts should be considered for public ownership, as the best means of driving forward a just energy transition.
- Carry out a detailed assessment of the overlap and any gaps in skills required for clean energy sectors to allocate finance and support for re-skilling where needed.

ENABLE A JUST TRANSITION FOR WORKERS AND COMMUNITIES:

- Use licencing, permitting, or financing conditions to ensure designs of new offshore renewable installations contain no barriers to transferability of oil and gas workers, and advocate for harmonisation of international renewables standards (e.g. the Global Wind Organisation) with those in oil and gas.
- Prepare Just Transition plans for oil and gas with the participation of trade unions and representatives of affected communities, including the following safeguards:
    - Accountability to worker representatives and affected communities
    - Where jobs are lost, new ones created with equivalent terms and conditions and permanent contracts
    - Support for the transitioning workforce, including free access to and paid time off for education, fully paid-for voluntary relocation or retraining where necessary, pension protection and wage protection for five years where matching salaries cannot be secured.
    - Trade union rights for workers affected by energy transitions, including union recognition in workplaces and sectoral bargaining.
    - Create regional policies and long-term investment programmes for oil industry centres, particularly Aberdeen and Aberdeenshire.

THE COUNCILS' ROLE

Aberdeen City Council and Aberdeenshire Council should drive the transition from dependency on fossil fuels by:

- Declaring a Climate Emergency
- Divesting from Oil & Gas investments

- Taking out all reference to maximising oil and gas revenues and production/ support for carbon industries in current strategies, plans and investment and ensure that all key agencies, such as, OGTC, ONE etc. do the same.
- Providing advocacy and education on the climate emergency and what is required to avoid the worst of it, to companies and workers in the oil and gas industry
- Providing information, support, funding and guidance on how to transition for workers and companies within the oil and gas industry
- Implementing the recommendations, applicable to local governance, in section 8 of SeaChange report and apply pressure on central government to implement the rest
- Implementing the Powering Aberdeen Strategy
- Providing more funding and support for the Circular North East project and projects that develop a circular economy.
- Providing collaboration space for the early-stage innovations
- Ensuring that the speed of change was rapid
- Providing communities with a 'Community Hub'

DECLARE A CLIMATE EMERGENCY

Our participants wanted the councils to each commission a report on what the council would need to do internally to fulfil that criterion i.e. to internally decarbonise itself and also what would be needed to provide direction and leadership to decarbonising the whole region. Then devise a strategy and plan on how to achieve that goal and implement it. It could publicise itself as an "Energy Transition City/ region".

It was felt that that the Councils should also divest their investments from Hydrocarbons. More information on LAs divestment can be found here: https://631nj1ki9k11gbkhx39b3qpz-wpengine.netdna-ssl.com/uk/wp-content/uploads/sites/3/2016/12/Councillor-Briefing-Elections-Updated.pdf

CHANGE REGIONAL PLANS, STRATEGIES & INVESTMENTS

Currently, the Councils and the regional deal/ related strategies and planning aim to maximise oil and gas revenue and production in the North Sea. This has to explicitly stop and instead there needs to be a focus on transitioning. The Oil & Gas Technology Centre and Oil & Gas Innovation Centre etc. need to be renamed and their strategies changed to focus on Clean Tech. The Council must also ensure that ONE changes its Renaissance Plan and first pillar to stop referring to and supporting the maximising of oil and gas production and revenue and instead focus on the support and development of Clean Tech. The extraction of hydrocarbons must be explicitly not supported, with only decommissioning in this area given support.

EDUCATION, GUIDANCE & SUPPORT TO TRANSITION

In order to create a climate conducive to change the councils need to educate people on why there needs to be a just managed transition and how it can benefit themselves and the region. They need to provide information, education and advocacy on the climate emergency and what is required to avoid the worst of it, to companies and workers in the oil and gas industry, and all the inhabitants of the region.

They also need to provide specific information, support and guidance on how to transition for workers and companies within the oil and gas industry and back that up with training, funding and mentoring for those transitioning. Guidance, support and information for the transition of both "local" companies and their employees needs to be financially supported and promoted by both councils and various agencies such as Opportunity North East, Scottish Enterprise, Skills Development Scotland, Business Gateways etc. as it is at the core of their interests.

There needs to be a regional strategy created and implemented that incentivises clean tech companies to base themselves here in the North East.

Corporate examples of diversification should be given a platform to spread their ideas to other companies, and the councils should devise a procurement preference for diversified and diversifying companies.

POWERING ABERDEEN INITIATIVE

The Powering Aberdeen Strategy, which resulted in an in-depth report[34], should be implemented in full. The combination of the described measures in Aberdeen's Sustainable Energy Action Plan (ASEAP): greater uptake of alternative energy and the implementation of new technology to reduce resource use and improve efficiency, have the potential to drive real change, but need to be adhered to and widened in scope.

CIRCULAR ECONOMY

The Circular North East project, situated in Grampian Chamber of Commerce, needs to have much more support and funding. Aberdeenshire Council's Sustainability Team's work in initiating and supporting circular economy initiative and businesses are to be applauded but more needs to be done to incentivise and support small businesses to develop in this area and encourage bigger businesses to move into this area. When transitioning, a circular economy outlook and focus is essential.

COLLABORATION SPACE

Developing a decarbonising idea into a decarbonising activity or business takes time, and connections with like-minded active thinkers and doers. There is little available collaboration space at present for the early-stage innovations which drive the real change. Currently, it seems as if, the councils' focus is on supporting established businesses, on those who have the funds to self-finance, and on those who have established networks, there needs to be more support for those that do not fall within these categories.

[34] https://www.aberdeencity.gov.uk/sites/default/files/2017-09/Powering%20Aberdeen.pdf

To quicken the pace of this clean-tech start-up 'revolution' the councils can supply cheap or free collaborative office and development space, with IT infrastructure , where networks can be built and supporters and collaborators found. Multiple locations with cross-connections would be even better. National and international networks exist, ready to connect with.

As stimulus the Councils could also challenge this "collective of individuals" to develop solutions to its own challenges, like it already has done, in the past, in collaboration with the Universities with City Lab[35], but widen this to include those out with this sphere. These solutions should then be implemented. High powered engineering mentors are available in the region, both in and retired from the oil industry, to enhance the effectiveness of these proposals.

COMMUNITY HUBS

In all areas of the climate cafe discussions the need arose for community hubs to teach and support community development, living sustainably and reducing waste. A community hub would be a space/ building, with land for community growing and use either attached or nearby. Each community would have its own hub and the network would be supported and ran by the Council. There would need to be at least one paid member of staff in each hub, helped by a committee and roster of volunteers. The Hub would be a place where the community could run repair and reuse/ upcycling workshops, training and educational events on living sustainably, cookery workshops, 'grow your own' practical training, run a 'library of things'[36], bike/ ebike rental point, car charge point etc. It was noted that Aberdeen City Council was running some sort of trial for this kind of community hub in Torry at the moment but we are unable to include more on it in this report, as we do not have full details on it.

SPEED OF CHANGE ACHIEVED

Action needs to be taken now to avert a climate catastrophe. If action is not taken now it will be too late. The Councils need to act fast and not merely commission reports, which take ages to develop and then are not implemented or not implemented in concert and in a timely fashion.

There needs to be cross regional collaboration, driven by the Councils, with all the relevant stakeholders: the local universities; businesses, Chamber of Commerce, nonprofit organisations, community councils, schools etc. on how to convert the region to zero-carbon in the quickest and most effective way should be set up, with e.g. commitment from the councils to implement one strategy each month, and commit to maintain it for a minimum of 10 years or until something better comes up to replace it.

REPORT CONCLUSIONS

In all the discussions that formed part of this consultation, the key element is that people want local and central governments to actually be explicitly focusing on climate change, the need to live sustainably and drive greenhouse gas emissions to net zero even sooner than 2045. They want a clear joined up

[35] https://citylababz.wordpress.com/
[36] https://www.libraryofthings.co.uk/

strategic approach on getting to net zero emission in the region to be specified and implemented as a priority as soon as possible. They wanted to see that all levels of government understand the urgency with which action must be taken. A declaration of a climate emergency by the councils would address this. It would also be in the councils' best interest to create a regional board/ climate assembly, whose specific remit is to create, update and monitor a zero emissions strategy and related actions and to provide a level of accountability to ensure that these are implemented. This would prove not only practically useful but also would be a very visual declaration of action.

The councils are seen to be the natural leaders, together with central government, in driving the region to reach net zero carbon/ GHG emissions. It is by the councils' strategies, actions, funding and support that this transition can smoothly take place. There is an understanding of the need for collaboration with all sectors of society to make that happen. The climate emergency needs, however, to be at the forefront of all the councils' decisions. Climate change considerations need to be mainstreamed through all council decisions, with uptake of the low carbon options being the default position. Until this is done, environmental issues will remain an afterthought in planning and legislating etc., which we really cannot afford to do anymore. By implementing the changes and suggestions from this report, the North East can lead by example in being an environmentally friendly region.

The participants in the discussions were very focused on what the councils' needed to do to facilitate them being able to live a low carbon lifestyle. People find it very difficult to make the necessary decisions and changes without the requisite support from those that govern. The councils need to take a much more proactive approach to not only carrying out the kind of recommendations mentioned in this report but, explicitly letting people know what they are doing/ signposting and ensuring that people can access the relevant information and services easily. Communication is key.

It has to be understood that this is only a consultation report: it is not a professional report and, as such, there are gaps in it. It does not provide a complete answer. What it does do, however, is provide a lot of very good sensible, and proven to work, solutions and recommendations in the areas discussed. It also shows very clearly that there is a drive and a need for change and the councils to show leadership in driving the transition to a net zero region.