#### **Public Document Pack**



#### Argyll and Bute Council Comhairle Earra-Ghàidheal Agus Bhòid

Executive Director: Douglas Hendry

Kilmory, Lochgilphead, PA31 8RT Tel: 01546 602127 Fax: 01546 604435 DX 599700 LOCHGILPHEAD 9 January 2020

#### NOTICE OF MEETING

A meeting of the CLIMATE CHANGE ENVIRONMENTAL ACTION GROUP will be held in COMMITTEE ROOM 1, KILMORY, LOCHGILPHEAD on THURSDAY, 16 JANUARY 2020 at 10:00 AM, which you are requested to attend.

Douglas Hendry Executive Director

#### **BUSINESS**

- 1. APOLOGIES
- 2. DECLARATIONS OF INTEREST
- 3. MINUTE OF PREVIOUS MEETING HELD ON THURSDAY, 7 NOVEMBER 2019 (Pages 3 6)
- 4. 2025 LANDFILL (BIO-DEGRADABLE MUNICIPAL WASTE) BAN (Pages 7 16)
  Report by Executive Director with responsibility for Development and Infrastructure Services
- UPDATE ON RENEWABLE ENERGY ACTION PLAN (Pages 17 32)
   Report by Executive Director with responsibility for Development and Economic Growth
- 6. CLIMATE CHANGE POLICY AND INDICATORS TO FOLLOW Report by Executive Director with responsibility for Commercial Services
- 7. EXTERNAL ENGAGEMENT (Pages 33 34)
  Report by Executive Director with responsibility for Commercial Services
- 8. PLAN OF ACTIVITY (Pages 35 36)

For noting and Updating

REPORTS FOR NOTING

#### CONSULTATION ON THE ROLE OF THE PUBLIC SECTOR BODIES IN 9. **TACKLING CLIMATE CHANGE** (Pages 37 - 40)

Report by Executive Director with responsibility for Commercial Services

#### **Climate Change Environmental Action Group**

Councillor Rory Colville (Vice-Chair) Councillor Jim Findlay Councillor Bobby Good Councillor Jim Lynch

Councillor Kieron Green Councillor Aileen Morton (Chair)

Shona Barton, Committee Manager

Contact: Lynsey Innis, Senior Committee Assistant; Tel: 01546 604338

## Public Document Pack Agenda Item 3

# MINUTES of MEETING of CLIMATE CHANGE ENVIRONMENTAL ACTION GROUP held in the COUNCIL CHAMBERS, KILMORY, LOCHGILPHEAD on THURSDAY, 7 NOVEMBER 2019

Present: Councillor Aileen Morton (Chair)

Councillor Rory Colville, by Skype Councillor Kieron Green Councillor Jim Findlay Councillor Jim Lynch

Councillor Bobby Good

**Attending:** Ross McLaughlin, Head of Commercial Services

Shona Barton, Committee Manager

#### 1. APOLOGIES

There were no apologies for absence intimated.

#### 2. DECLARATIONS OF INTEREST

There were no declarations of interest intimated.

#### 3. GOVERNANCE ARRANGEMENTS

Having noted the purpose of the group is to consider and advise on policy options and opportunities for strategic projects and activities that will form part of the ongoing commitment to deliver the Climate Change (Scotland) Act, the group gave consideration to a report setting out the governance arrangements and proposed future meeting dates to allow for recommended actions from the group to be reported back to the Council by August 2020 or earlier.

#### Decision

The Climate Change Environmental Action Group:

- 1. agreed to note the contents of the report; and
- 2. agreed to the future meeting dates as outlined at paragraph 3.3 of the report.

(Ref: Report by Executive Director with responsibility for Commercial Services and Strategic Priorities, dated 7 November 2019, submitted.)

#### 4. PLAN AND FOCUS OF ACTIVITY

Having noted the requirement from the Council to submit a plan of activity to the December 2019 Policy and Resources Committee, the group gave consideration to a report highlighting ongoing works at both global and national levels, together with information on how the Council has been considering and addressing aspects of Climate Change on a number of fronts for over a decade. The report included a proposed activity plan for the group, which aimed to focus resource and set ambitious yet achievable goals and targets to deliver maximum impact.

Discussion took place in respect of carbon neutral targets; the existing Council and Corporate policy approach to addressing climate change and the decision not to include the Biodegradable Municipal Waste (BMW) project as part of the considerations of the Short Life Working Group.

Further discussion took place in respect of the communications and engagement strategy and information gathering, particularly in relation to industries of interest, including renewables, timber, tourism and transportation. Members requested that the Head of Commercial Services liaise with colleagues from the Climate Change Board with a view to bringing forward a briefing report on the BMW project outlining the current position and where we will be by 2025 to the next meeting of the group in January 2020. Mr McLaughlin also agreed to invite the Councils Projects and Regeneration Manager to the next meeting of the group to provide an update on the recently signed off renewable energy action plan to include information on windfarm developments in the area.

#### Decision

The Climate Change Environmental Action Group agreed:

- 1. to note the contents of the report;
- 2. to approve the proposed plan of activity subject to the amendments made by Members during discussion;
- 3. that the plan of activity be brought to each meeting of the Group to provide focus and aid in the setting of goals and targets to deliver maximum impact; and
- 4. that the plan of activity be presented to the Policy and Resources Committee at their meeting in December 2019.

(Ref: Report by Executive Director with responsibility for Commercial Services, dated 7 November 2019, submitted.)

## 5. CONSULTATION ON THE ROLE OF PUBLIC SECTOR BODIES IN TACKLING CLIMATE CHANGE

The group gave consideration to a report outlining the details of the Scottish Government consultation titled 'The role of public sector bodies in tackling climate change.'

#### Decision

The Climate Change Environmental Action Group:

- 1. noted the details of the live Scottish Government consultation;
- 2. agreed to feedback any comments relating to the consultation to the Climate Change Board before their meeting on 11 November so they can be considered; and
- 3. noted that the final consultation response will be presented to the group at their next meeting in January 2020.

### Page 5

(Ref: Report by Executive Director with responsibility for Commercial Services, dated 7 November 2019, submitted.)

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ARGYLL AND BUTE COUNCIL

CLIMATE CHANGE ENVIRONMENTAL ACTION GROUP

ROADS AND INFRASTRUCTURE SERVICES

**16TH JANUARY 2020** 

2025 Landfill (Bio-degradable Municipal Waste) Ban

#### 1.0 EXECUTIVE SUMMARY

- 1.1 The aim of this report is to provide the Short Life Working Group on Climate Change with a high level summary of:
  - The background of the 2025 Landfill ban,
  - Recent policy changes,
  - The environmental benefit of compliance.
- 1.2 Details of the financial impact of the ban and the technical solutions proposed can be found in the Waste Strategy Reports to the Environment, Development and Infrastructure committee in September 2019. The reports pack and minute of the meeting can be found using the following link: <a href="https://www.argyll-bute.gov.uk/moderngov/ieListDocuments.aspx?Cld=546&Mld=8387&Ver=4">https://www.argyll-bute.gov.uk/moderngov/ieListDocuments.aspx?Cld=546&Mld=8387&Ver=4</a>
- 1.3 The report includes details of Scottish Governments policy position on the Biodegradable Municipal Waste ban and the types of financial and practical support the council is seeking to enable compliance.
- 1.4 This report shows that using the UK government conversion factors and our own waste data that landfill as method generates a large amount of CO2e. The report goes on to make clear that the alternative forms of disposal proposed (Composting and Energy from Waste (Incineration)) have a significantly lower level of CO2e generation.

#### Recommendation

- 1.5 It is recommended that Members:
  - consider the content of the report and;
  - note that further updates relating to the Waste Strategy will be considered by the Environment, Development and Infrastructure Committee in due course.

ARGYLL AND BUTE COUNCIL

CLIMATE CHANGE ENVIRONMENTAL

**ACTION GROUP** 

ROADS AND INFRASTRUCTURE SERVICE

**16TH JANUARY 2020** 

2025 Landfill (Bio-degradable Municipal Waste) Ban

#### 2.0 INTRODUCTION AND BACKGROUND

2.1 Argyll and Bute Council is both a waste collection and waste disposal authority.

Waste collection is carried out by Council staff with assistance from third sector organisations who have responsibility for some recycled materials. Waste disposal is carried out by using three separate models across the Council:

- Island sites which are operated directly by the Council;
- A 25 year PPP contract covering the mainland excluding Helensburgh and Lomond, this contract runs until 2026;
- Helensburgh and Lomond where waste is collected and disposed of at third party sites out-with Argyll and Bute.
- 2.2 The dominant Waste Disposal methodology for non-recyclable Residual waste across Scotland is disposal via landfill. However disposal of waste via landfill is a significant contributor to Scotland's overall Green House Gas production. Landfill gases contain large amounts of Methane, which is around 6 times more damaging that Carbon Dioxide.
- 2.3 In response to Climate Change caused by Green House Gas emission, the Scottish Government since 2009 has pursued a programme of policy changes designed to move Scotland towards Carbon Neutrality and a Circular Economy. It is the view of the Scottish Government and Zero Waste Scotland that better more responsible resource management will play a critical part in achieving both Carbon Neutrality and a Circular Economy. Landfill accounts for around half of the councils' annual production of Carbon Dioxide equivalent emissions (CO2e).

- 2.4 The landfill ban is a measure brought in under the Waste Regulations (Scotland) 2012. By ending Landfill as a means of disposal and switching to disposal via Energy from Waste (EfW) the Scottish Government expect a significant reduction in CO2e generated from Waste. The ban was planned to come into force across all of Scotland from January 2021. However the deadline for compliance with the ban has now been put back to January 2025, further details on the change in policy can be found in section 4.
- 2.5 The council recognises the serious global impacts of climate change and is committed to reducing the environmental impact of the council and its residents. In September, the council established a short life working group to develop policy options and opportunities for strategic projects and activities that will further enhance the councils' contribution to addressing this global issue and delivering the Climate Change (Scotland) Act. The council fully supports the goals and objectives of the Scottish Governments policy of a ban on the disposal of Biodegradable Municipal Waste in Landfill. The council accepts and endorses that increased waste reduction, reuse and recycling is critical to achieving the Scottish Governments 2045 target of a net zero carbon economy.
- 2.6 Changing the council waste disposal methodology with a move away from landfill to EfW is extremely challenging for every local authority. However, Argyll and Bute faces a unique set of circumstances that disproportionality increase this cost challenge of landfill ban compliance. The challenges faced by the council include:
  - Argyll and Bute's geography resulting in poor access to market leading to a dramatic and an ongoing increase in revenue costs as a result of haulage/ferry requirements;
  - A Waste PPP contract with Renewi (covering mainland Argyll, Bute and the Small Isles excluding Helensburgh and Lomond) that subsists until September 2026.
     The introduction of the ban on disposal via landfill constitutes a material change on this contract. The PPP contract is very difficult and costly to vary in anyway.
  - A low overall level of residual waste tonnage feedstock that rules out standalone Argyll and Bute based EfW operations;
  - High capital cost impact of the conversion of existing landfill facilities into a network of Waste Transfer Sites that would allow for the bulking and transport of waste to EfW plants;
  - The significant revenue cost increase as a result of Scottish EfW gate fees resulting from an ongoing shortfall nationally of EfW capacity;
  - The impact on ferry capacity and road infrastructure as a result of the increased haulage requirements from transporting waste to be recovered as EfW.

#### 3.0 RECOMMENDATIONS

- 3.1 It is recommended that Members:
  - consider the content of the report and;
  - note that further updates relating to the Waste Strategy will be considered by the Environment, Development and Infrastructure Committee in due course.

#### 4.0 POLICY POSITION

- 4.1 The Biodegradable Municipal Waste landfill ban is a measure brought in under the Waste Regulations (Scotland) 2012. The ban was planned to come into force across all of Scotland from January 2021.
- 4.2 Non-compliance with the Biodegradable Municipal Waste ban is not an option. Ministers expect local authorities and private sector suppliers to be working towards a solution at pace and that non-compliance may be subject to sanctions. Non-compliance with landfill licence requirements could become a criminal matter.
- 4.3 All local authorities in Scotland face significant cost challenges as result of transition to ban compliant methods of recovery such as EfW. In May of 2019 the Scottish Government published their analysis of the waste market and available Scottish EfW capacity for the period from the ban "go live date" of 2021 to 2025. The results of that study show that there is a likely shortfall in Scottish EfW capacity of around 1 million tonnes in year one of the ban falling to 0.5 million tonnes in year to and dropping further but remaining at a deficit until beyond 2025.
- 4.4 The large deficit in Scottish EfW capacity identified in the report highlighted that if the ban was to come into force in 2021 as planned; it force at least 50% of the local authority waste to be either exported to the EU (for recovery) or England (for landfill or EfW). The export of waste to be disposed of elsewhere was viewed by COSLA, the CIWM and the Waste Managers network as contrary to the aims and objectives of the ban. Already faced with significant pressure from rural and island authorities now compounded by additional pressure resulting from the conclusions of the report into the market the Scottish Government announced in July that they would consider delaying the implementation of the ban to allow authorities and the market additional time to prepare for the ban.
- 4.5 The change of implementation date from January 2021 to January 2025 was announced by the Cabinet Secretary for Environment, Climate Change and Land Reform, Roseanna Cunningham MSP (CabSec) in her letter to stakeholders dated the 19th of September.
- 4.6 The reasons for the change in implementation date from 2021 to 2025 are noted in the CabSec's letter to stakeholders. The key reasons can be summarised as:
  - The Scottish Governments publication of their own evaluation of the landfill ban Waste Market assessment shows that with a 2021 implementation date that there would be a shortfall of Scottish EfW capacity of around 1.2m tonnes in the first year of the ban falling to around 600k tonnes by 2022. Due to this shortfall large amounts of residual waste would have to be either sent for recovery via EfW in the EU or alternatively landfilled in England. Landfill of

Scottish local authority waste in England is viewed by the Scottish Government as being unacceptable both from an environmental and landfill tax perspective. In addition the costs of export to the EU of waste for recovery via EfW are uncertain due to Brexit.

- Pressure from COSLA, SOLACE, industry and local Authorities on the Scottish Government to revaluate the 2021 implementation date to allow for development of EfW capacity and combined development and sourcing of ban solutions.
- 4.7 The CabSec's letter to stakeholders frames the landfill ban as a key part of the Scottish Governments drive towards a net zero Carbon economy. As is noted in the letter the Scottish Government have taken advice from the Committee for Climate change and have stepped up their commitment to achieved net zero Carbon economy by 2045. This along with other measures formed a key part of the Scottish Government's programme for Government announced by the First Minister in September.
- 4.8 The tone of the letter from the CabSec is clear that changing the terms of the landfill ban by delaying the implementation date is viewed by the Scottish Government as a necessity all be it one that poses political challenges. The letter does acknowledge some challenges faced by the sector in complying with the landfill ban as laid out in 2.1. However the CabSec also makes it very clear that the Scottish Government is disappointed in the "lack of progress made to date". The CabSec also goes on to say that she expects "local authorities and the commercial sector to make further progress at pace before the legislation needed to extend the deadline is made." However from a local authority perspective this request must be met with a strong commitment from the Scottish Government to work with local authorities to develop and resource solutions that will enable compliance with the ban and reduce its revenue cost impact.
- 4.9 The CabSec goes on to say she plans to implement a centrally coordinated intervention to "to help the remaining local authorities procure solutions for the remaining tonnage of waste that provide the necessary contract length to support investment." This will take the form of a joint COSLA/Scottish Government working group, this is currently not in place.
- 4.10 The letter does provide certainty on the revised ban implementation date but does leave open questions on Landfill Tax. It is suggested by the CabSec in her letter that an incremental accelerator will be applied to Landfill Tax to incentivise early compliance. Officers to date have been given no details of what this accelerator will look like and by what rate it will rise to by 2025. It has been suggested that one of the first tasks of the new joint officer working group will be to study and report on and recommend to the Scottish Government what an appropriate rate would be. Anecdotally Scottish Government Officials are keen to avoid an overly punitive rate increment as they feel that it may result in an unintended consequence of the export of waste to landfill in England.

- 4.11 The CabSec's letter makes no reference to regulatory change in relation to rural food waste exemptions. Currently to qualify for a food waste collection and disposal service settlements must reach a population count of 10k, the only area to meet this criteria in Argyll and Bute is Helensburgh and Lomond. The Scottish Government has made it clear that they are going to carry out a review of the rural exemption and will be seeking to create a more nuanced approach rather than a population count. The timescale of the review is currently unknown but is likely to take place in early 2020 with a view to make recommendations prior to the next Holyrood election. Changes in the status of food waste collections will have a significant impact on the PPP agreement and proposals for landfill ban compliance. It is also unclear if this would be viewed by the Scottish Government as a new burden on rural/island local authorities and as a result would be funded by them. It is likely that this review will come under the brief of the new joint officer working group.
- 4.12 Argyll and Bute council is now represented on the joint officer working group by the Head of Roads and Infrastructure Services (Jim Smith) with support from the Waste Strategy Project Manager (Peter Leckie). The first meeting of the group is due to take place in February 2020.

#### 5.0 ENVIRONMENTAL IMPACT OF BAN COMPLIANCE

- Globally it is estimated that Waste Disposal accounts for around 4% of all Greenhouse gas emissions. Disposal via landfill is the worst performing of all disposal methodologies as it not only allows for high production of CO2e/Greenhouse Gas as the material breaks down but it also does not recoup any value for the material. Food waste and other Biodegradable material make up around 70% of the material in our residual waste bins. When this material breaks down in landfill it releases Methane and other Greenhouse Gases into the atmosphere. Methane is 6 times more damaging to the atmosphere than CO2. The landfill ban would see this biodegradable material capture and recovered via EfW which would reduce CO2e production from landfill by around 95%.
- In the Waste Strategy the council committed to working to meet the Scottish Governments Zero Waste and Circular Economy targets by basing our waste disposal services around the Waste Hierarchy. Achieving this objective will have positive effect on the councils Green House Gas output. Through framing the policy initiative on the Waste Hierarchy we will also able to achieve savings as a smaller decreasing amount of Waste goes to Disposal or Recovery (EfW). Using promotional tools such as Social Media and the Councils Websites as well as direct engagement at events etc. We will educate residents, business, visitors and Council employees on the need to Reduce, Reuse and Recycle following the waste hierarchy to reduce Waste going for either Disposal or Recovery.
- 5.3 In the Waste Strategy the council acknowledged that the public of Argyll and Bute have a crucial role to play in not only maintaining current recycling and diversion rates levels, but also making positive changes supporting the Councils ability to increase diversion and recycling rates. Strong education and communications will be implemented and sustained with regular refreshes of

content to reinforce the waste reduction message. From feedback from the waste strategy consultation it is clear that the public value their waste disposal services and they strongly support all efforts made to promote waste reduction, reuse and recycling. To increase engagement and to support the public's desire to reduce, reuse and recycle we intend to make several improvements to our content:

- Clear unambiguous guidance on what can and cannot be recycled by the council;
- Cradle to grave information on all of our different waste streams, detailing the end destinations of our waste;
- Advice on how to reduce food waste;
- Active promotion of local reuse charities and groups;
- · Guidance on beach cleans and marine litter;
- Publication of the council's annual waste performance information.
- 5.4 The Scottish Government recognised that imposing a ban on the disposal of Biodegradable Municipal Waste at landfill would effectively end landfill as a disposal method. In turn authorities would have to implement alternative arrangements for the disposal of their residual waste. Incineration via EfW that recovers heat for use in the generation alongside composting are viewed as the most viable alternatives.
- The main environmental benefit of moving away from landfill is a drop in the amount of new CO2e generated. Using the 2018 waste performance figures, Table 1 below shows the CO2e levels generated in a year where landfill was the dominant methodology.

Table 1

2018 Basline Performance							
Tonnago					Residual		
Tonnage Landfilled	Landfill CO2e	Tonnage	Recovery Recycling		Haluage		
Landilled		Recovered/Recycled	CO2e	Total Arisings	Mileage/Week	Haulage CO2e	Total CO2e
30,084	17,645	28,872	617	58,956	0	0	18,261

5.6 Using the 2018 tonnage information but applied to the different compliance options (composting and EfW) open to the council when we run the same tonnage quantity through a mixture of IVC and Waste Transfer with the same conversion factors applied there is a significant drop in CO2e produced of around 17k tonnes. This is a drop of around 94% in the amount of CO2e produced. This would equate a reduction by almost 45% in the councils overall CO2e footprint. The increase haulage required would generate an increase of 86 kilos of CO2e. This demonstrates that from a purely CO2e perspective that the Composting and EfW model has a lower carbon cost and therefore greater environmental benefit.

Table 2

IVC and Transfer to EfW							
		Tonnage			Residual		
Tonnage IVC	IVC CO2e	Recovered/Recycled/	Recovery Recycling		Haluage		
	EfW EfW CO2e Total Arisings Mileage/Week Haulage CO2e Total CO2e				Total CO2e		
12,034	125	46,922	1,002	58,956	1,524	86	1,214

5.7 Comparing the carbon cost of the composting/EfW solution with some waste transfer solution to system of EfW only indicates that there would be slight increase in the amount of CO2e generated. However, when compared to a Landfill solution there is still significant CO2e saving of around 17k tonnes per annum.

Table 3

	Transfer to EfW only							
T					Residual			
Tonnage Landfilled	Landfill CO2e	Tonnage	Recovery Recycling		Haluage			
Landillied		Recovered/Recycled	CO2e	Total Arisings	Mileage/Week	Haluage CO2e	Total CO2e	
0	0	58,956	1,259	58,956	2,074	118	1,377	

It is important to note that the figures used to calculate the potential reduction are based on the councils' own metered data. The Carbon equivalent factor used in the calculations is not fixed as is set by the UK Government. As such the factor is subject to regular review and may change in future.

#### 6.0 CONCLUSION

- 6.1 Changing Waste Disposal methods from landfill by 2025 to EfW does have significant benefit to our local and national environmental performance. The council's assessment of the costs of compliance with the Biodegradable Municipal Waste ban shows that there will be a significant increase in revenue costs to the council. Depending on the solutions that are put in place the range of cost increase could be between £3.6m and £6m per annum. There is also a significant capital cost requirement to support the necessary transition to ban compliance of around £2m to £3m.
- 6.2 Argyll and Bute Council remain committed to complying fully with the ban ahead of the 2025 commencement date. However, due to the disproportionate challenge the council faces due to our rural/island geography and our existing contractual commitments to the Waste PPP agreement we require a mixture of practical and financial support from the Scottish Government to achieve this transition and secure a significant reduction in CO2e generation.

#### 7.0 IMPLICATIONS

7.1 Policy – It is the policy of the council to support the aims and objectives of the landfill ban. However without additional funding and practical support compliance ahead and after 2025 poses a serious challenge.

- 7.2 Financial The financial impact of the Biodegradable Municipal Waste ban present significant challenge to the council with a worst case scenario of an increase in revenue spending of around £6m per annum.
- 7.3 Legal the Council will be required to comply with any new national legislation regarding waste disposal.
- 7.4 HR None.
- 7.5 Fairer Scotland Duty:
- 7.5.1 Equalities protected characteristics- None known
- 7.5.2 Socio-economic Duty None known
- 7.5.3 Islands EQSEIA, Island Impact Assessment of the landfill ban to be carried out by the Scottish Government
- 7.6. Risk Significant risk of increased costs as result of compliance with the Biodegradable Municipal Waste ban, compliant solution cannot be procured or contract varied in time.
- 7.7 Customer Service Improvements on the information we provide on Waste disposal and recycling will play a key part in achieving our environmental goals and supporting compliance with the Biodegradable Municipal Waste ban.

Interim Executive Director with responsibility for Development and Infrastructure services, Kirsty Flanagan

Joint Policy Leads, Cllr Gary Mulvaney and Cllr Robin Currie

19/12/2019

#### For further information contact:

Peter Leckie, Waste Strategy Project Manager

Jim Smith, Head of Roads and Infrastructure Services

#### **APPENDICES**

None



ARGYLL AND BUTE COUNCIL

CLIIMATE CHANGE ENVIRONMENTAL ACTION GROUP

DEVELOPMENT AND ECONOMIC GROWTH

**16TH JANUARY 2019** 

#### **UPDATE ON RENEWABLE ENERGY ACTION PLAN**

#### 1.0 INTRODUCTION

- 1.1 The purpose of this covering report is to provide context to Members for the accompanying presentation, on the renewable energy sector in Argyll and Bute and how it can assist in combating climate change to deliver Scotland and the UK's climate change targets.
- 1.2 Argyll and Bute has a significant natural renewable resource ranging from wind, wave, tidal, biomass (from our forestry) and solar and this can be used as a mechanism to reduce our carbon footprint and help mitigate the impacts of climate change as well as delivering economic benefit to our communities. It is difficult to quantify exactly the reduction in carbon emissions as a total from all current renewable projects in Argyll and Bute. However, renewable projects do displace the need to generate electricity from fossil fuels, resulting in reduced total carbon emissions. Figures that are available at a Scottish level show that in 2016 renewable electricity generation displaced approximately 9,400,000 tonnes of CO2, equal to around 21 per cent of Scotland's carbon emissions in 2015, the most recent year for which carbon emission statistics are available. Source: (Scottish Renewables, Renewables in Numbers)
- 1.3 On the 20 December 2017, the Scottish Government published its first Energy Strategy which sets out their vision for the energy sector to 2050. The Strategy is focused on three main themes:
  - A whole system view a programme of energy efficiency and a new target that by 2030 the equivalent of 50% of Scotland's heat, transport and electricity consumption is to be supplied from renewable sources
  - A stable, managed energy transition the transition to a low carbon economy including use of Carbon Capture and Storage (CCS), low carbon energy production and support for new technologies and delivery models; and
  - A smarter model of local energy provision through the use of innovative technology to meet local energy needs through local energy

solutions.

- 1.4 The energy industry in Argyll is based on the use of renewable sources of power with hydro, solar, biomass and onshore wind particularly widely deployed at scales ranging from small domestic to larger commercial developments. There is currently more than 1.5GW of operational and consented renewable energy projects across Argyll and Bute, which is estimated as being sufficient to power more than 100 million LED lightbulbs or approximately 700,000 homes. The 1.5GW can be further broken down into 800 operational renewable projects including 15 large scale development projects. (Appendix 1)
- 1.5 As well as the carbon benefits there are economic benefits derived from the construction and maintenance of renewable developments including supply chain opportunities for our businesses. In addition to this, the majority of the large scale windfarms pay community benefit or returns on community investment which amounts to more than £800,000 per annum. (2019 figures)
- 1.6 Both the Argyll and Bute Outcome Improvement Plan 2013 2023 and the Argyll and Bute's Economic Strategy identify the positive contribution that renewables can make to the Argyll and Bute economy, our carbon footprint and both seek to support the development of the sector. However, the sector is heavily affected by activities and policies created at both the Scottish and UK Government level and over the past few years there has been an impact on onshore wind from the removal of the UK Government subsides support system. This has resulted in a slowdown in the number of new developments moving into construction. However as the industry has sought to secure new financial models for delivery consented on shore wind farm projects are starting to move to construction. An example of one such project is Beinn An Tuirc Phase 3, construction has commenced on the site of the 14 turbines (maximum height of 126 meters from the base to the tip of the blade) wind farm with a maximum output of 50MW.
- 1.7 In addition, potential opportunities are once again being considered for offshore wind on the west coast of Scotland where previously the focus has been on the east. The recently announced Scottish Government consultation for the Sectoral Marine Plan for Offshore Wind Energy (closing date on the 25<sup>th</sup> March 2020.) includes a proposed site off the west coast of Argyll.
- 1.8 It is also worth noting that the move towards local energy networks (local energy needs met through local energy provision, ideally through renewables) also offers potential benefits for our communities particularly in areas where the Gird is constrained. The ACCESS project on Mull is a good example of this as is the Islay Local Energy project currently at a very early stage of consideration. However this type of network is still at a very early stage in terms of development.
  - 1.9 The Argyll and Bute Renewable Energy Alliance (ABRA) established in 2011, brings together key public and private sector partners including Argyll and Bute Council, the Scottish Government, Highlands and Islands Enterprise, Marine Scotland, Scottish Power Renewables, Scottish and Southern Energy, The

Crown Estate Scotland, Scottish Natural Heritage and Skills Development Scotland. ABRA strives to ensure a greater awareness of the strategic issues relating to renewable development across Argyll and Bute, and to act as a key mechanism to assist with delivering the Renewable Energy Action Plan (REAP). The REAP was endorsed in 2010 and is reviewed on an annual basis by ABRA to assist Argyll and Bute realise its vision for the development of the renewable energy sector. The REAP is due to be reviewed and updated again this year and will be presented to members at the annual ABRA meeting in September 2020. The annual review seeks to reflect any changes coming forward across the sector and this year it is anticipated that there may be more focus on offshore wind opportunities. Key issues that are contained within the REAP each year relate to grid capacity/investment, skills and training and supply chain opportunities. Members of ABRA are also keen to consider widening the remit to cover energy as opposed to just renewables.

#### **RECOMMENDATIONS**

1.10 Members of the Climate Change Environmental Action Group are asked to consider report and accompanying presentation.

#### 2.0 IMPLICATIONS

2.1 **Policy** 

Argyll and Bute Outcome Improvement Plan 2013 - 2023 and Economic Strategy and the Renewable Energy Action Plan recognise the importance of renewables to the local economy and to our communities and in reducing carbon emissions

- 2.2 **Financial** None directly from this paper
- 2.3 **Legal** None
- 2.4 **HR** None
- 2.5 Fairer Scotland Duty None
- 2.5.1 Equalities protected characteristics None
- 2.5.2 Socio-economic Duty

Renewable sector offers opportunities to assist communities across Argyll and Bute to become more sustainable

2.5.3 **Islands** 

Our islands offer significant opportunities to deliver on the climate change targets given the natural renewable resources they offer.

2.6. **Risk** 

It is important that we maximise the opportunities from our natural renewable resources in a sustainable manner to deliver climate change targets and realise economic opportunities.

2.7 **Customer Service** – none

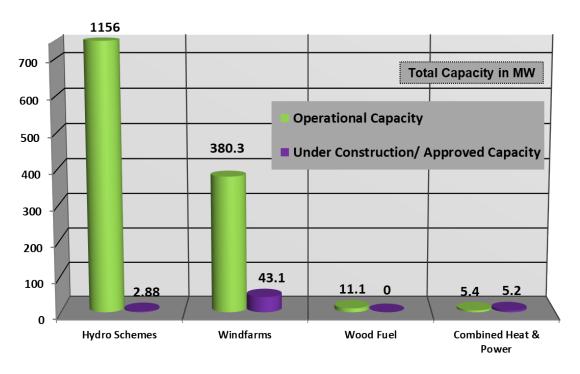
Kirsty Flanagan – Interim Executive Director with responsibility for Development and Economic Growth

#### **Policy Lead Councillor A Morton**

07 January 2020

**For further information contact:** Audrey Martin, Transformation, Projects and Regeneration

Appendix 1 – Renewable Energy Developments Chart Jan 2020





## RENEWABLES UPDATE

## Climate Change Environmental Action Group

Audrey Martin - Transformation, Projects and Regeneration Manager

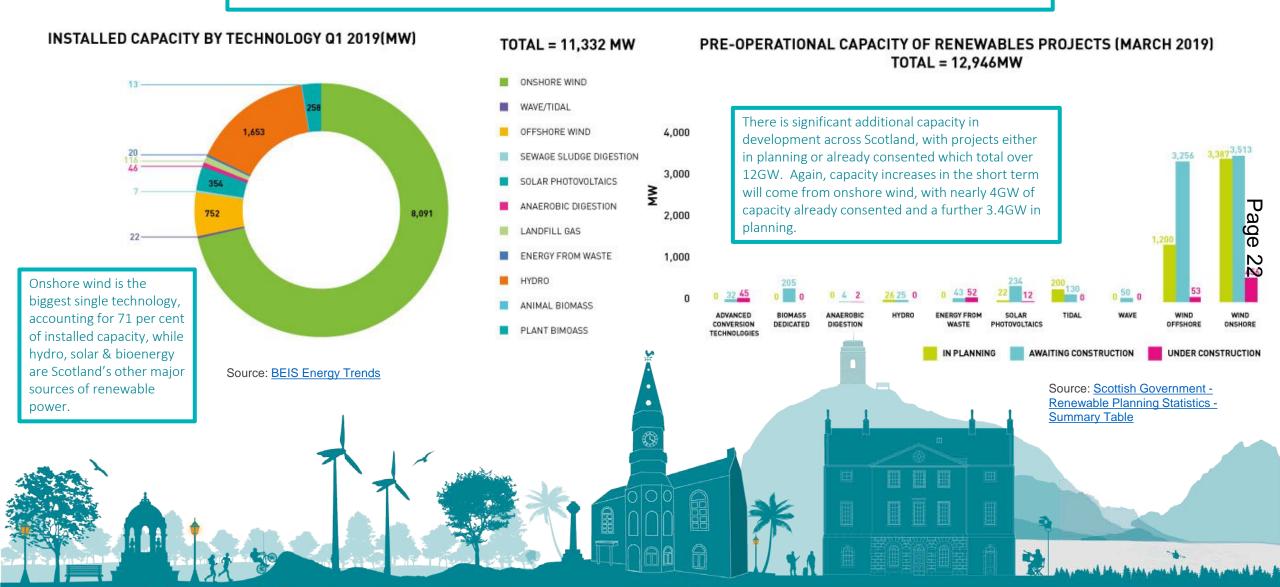




#### THE RENEWABLES INDUSTRY IN SCOTLAND 2019



Scottish Renewables has compiled the key statistics on the development of Scotland's renewable energy sector from a variety of government and industry sources in order to track the industry's growing contribution to our energy needs, our economy and our environment.



Argyll and Bute's abundance of wind, water and wave energy, and the energy potentially generated by biomass present key sustainable economic opportunities, which if harnessed and managed correctly can offset many of the problems faced by our peripheral and fragile locations.

#### WHAT ARE OUR STRENGTHS?

Argyll and Bute has an abundance of wind, water and wave energy due to its geographical position on the west coast.

Argyll and Bute is home to strong supply chain businesses such as CS Wind (Wind Tower Manufacturer), Renewable Parts and GSS Marine (Marine Services Support) which operate worldwide in the industry.

Argyll and Bute has a significant and distinguished track record of pioneering and delivering renewable energy projects, we are well placed to respond to the pressing timelines for the development of this industry and take advantage of the economic opportunities being offered to our communities from renewable energy.

Argyll and Bute champions innovation in the industry and is home to The Scottish Association for Marine Science (SAMS) is Scotland's largest and oldest independent marine science organisation, delivering marine science for a productive and sustainably managed marine environment through innovative research, education and engagement with society. In addition we have also seen a number of testing and demonstration wave and tidal renewable sites in Argyll and Bute.

#### WHAT ARE OUR CHALLENGES?

Argyll and Bute will always have challenges around logistics due to its geographical position to the UK. Exporting and importing in the industry can costly due to challenging infrastructure.

Argyll and Bute's offshore wind potential is still untapped. This is because of challenges related to the sea state, depth of the water and ecological designations around the seabed on the west coast and the cost of undertaking feasibility studies to ensure the environment is safe to build sites. However emerging technology may mitigate these risks in the near future.

In many areas of Argyll and Bute there is limited spare grid capacity. Improvements to the grid system can be both expensive and take considerable time to implement which creates a barrier for developers.

Argyll and Bute, as well as the rest of the UK have suffered from the cut in onshore subsides from the UK Government for onshore wind. This has resulted in many approved onshore projects taking longer to secure financial closure.







#### THE ARGYLL AND BUTE INTERACTIVE RENEWABLES MAP

There is an even spread of sites in Argyll and Bute with The majority being micro hydro schemes

The <u>interactive renewables map</u> is a tool incorporated into our Renewable Energy Action Plan which allows people to access up to date information from our planning system on Renewable Energy sites in Argyll and Bute.

#### **KEY FACTS**

7
Small scale
community windfarms
In Argyll and Bute
with a combined
Capacity of
2.4MW

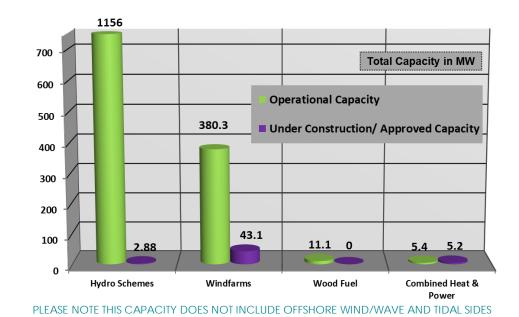
15 operational
Commercial windfarms
(7 on Kintyre Peninsula)
with a combined
Capacity of
346 MW

There is 1
commercial
windfarms currently
Approved in the
Planning system
and yet to begin
construction

The latest commercial windfarm to begin construction in September 2019 is Beinn An Tuirc Phase 3

# ARGYLL AND BUTE RENEWABLES DEVELOPMENTS

Total of **800**Operational renewable sites in Argyll and Bute Generating **1.5 GW** of Renewable
Energy



Ardnamurchan INNER Ben Nevis/ Beinn Nibheis HEBRIDES Acharacle Kinlochleve Ben Nevis & Tiree Ross of Mull Colonsav Dunoon Greenock Port ge N of Bute Portnahaven Lochranza 👸 Isle of West Kilbride Ardrossan Arran Brodick ISLE Irvine Sound of Islay ARRAN Tidal Stream Agree Prestwick Campbeltown Mull of Kintyre Wind - Community - Operational Wind - Community - Under Construction Wind - Community - Approved Woodfuel - Operational Woodfuel - Under Construction Woodfuel - Approved Hydro - Large - Operationa Hydro - Medium - Operationa Hydro - Micro - Operational Hydro - Micro - Under Construction Tidal Stream - Crown Estate Lease Areas Marine Scotland Wave Draft Plan Ontions Larne 12 Nautical Mile Limit





## **WORKING IN PARTNERSHIP**



#### WHAT IS ABRA?

The Argyll and Bute Renewable Energy Alliance (ABRA) was established in 2011 and brings together key public and private sector partners - including Argyll and Bute Council, the Scottish Government, Highlands and Islands Enterprise, Marine Scotland, Scottish Power Renewables, Scottish and Southern Energy, The Crown Estate Scotland, Scottish Natural Heritage and Skills Development Scotland - to ensure a greater awareness of all the issues relating to renewable development across Argyll and Bute, and to act as a key mechanism to assist with delivering the Renewable Energy Action Plan.





#### THE RENEWABLE ENERGY ACTION PLAN

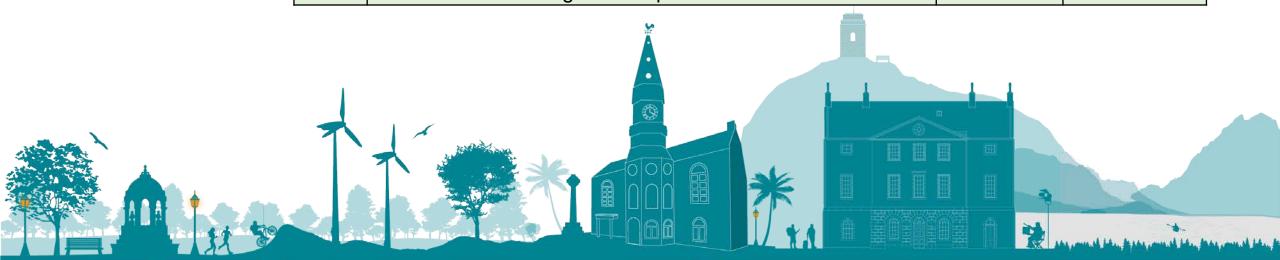
This Renewable Energy Action Plan has been developed to assist Argyll and Bute realise its vision for the development of renewable energy:



"Argyll and the Islands will be at the heart of renewable energy development in Scotland by taking full advantage of its unique and significant mix of indigenous renewable resources and maximising the opportunities for sustainable economic growth for the benefits of its communities and Scotland."

New Actions from 2019/20

Ref.	Action	Partner(s)	Timescale
ABRA	Review supply chain capacity and key capabilities in light		2019/20
5	of opportunities arising from future Crown Estate Scotland		
	leasing rounds		
ABRA6	Investigate opportunities for future Crown Estate Scotland		2019/20
	offshore wind easing rounds		
ABRA	Investigate opportunities for future local energy systems		2019/20
7	and innovative storage techniques		



Action	Partner(s)	Timescale
Ensure the grid is fit for purpose to meet renewable energy opportunities – Inveraray-Crossaig overhead line replacement, Northern Argyll substation, overhead line to Taynuilt and submarine cable replacement programme	ABC, HIE, SSEN	2021
Work with partners to examine opportunities for Smart Local Energy Systems/alternatives to grid improvement e.g. ACCESS project on Mull	LES, CES, SSEN	Ongoing
Promote Campbeltown as an energy port with future potential for Operations and Maintenance (O&M) activities associated with offshore renewables in the Irish Sea, Malin areas and along the Western Seaboard	ABC, HIE, SDI	Ongoing
Local supply chain events associated with renewable sector developments and online supplier portals e.g. Open 4 Business Portal	Renewables developers/HIE	Ad hoc as development occurs
Support to non-renewables sector businesses to expand into the renewables sector	ABC, HIE, SDS	Ongoing
Promote European Marine Science Park as a location for renewables related development	HIE	Ongoing
Consider future renewables business accommodation and land requirements and feed into Local Development Plan preparation and any relevant national policies	ABC, HIE, supply chain	Ongoing
Work with developers and future investors to identify any skills shortages	HIE, SDS, renewables developers, supply chain	Ongoing
Maintain suitable courses to support renewables and energy skills	Argyll College, UHI	Ongoing
Consider opportunities for apprenticeship/work experience programmes	SSEN, renewables developers	Ad hoc as development occurs
Schools education and skills career days	SPR via ALI Energy, ABC, renewables developers, SSEN	Ad hoc as development occurs
Investigate opportunities for shared ownership of renewables and respond to future Scottish Government consultations	Renewable developers, LES	Complete
Support community benefits from renewables development and respond to future Scottish Government consultations	Renewable developers, LES	Complete
Support community based renewables through the Community Renewable Opportunity Portal (CROP), direct support and events	LES, ABC	Ongoing
Influence legislation and policy development to ensure delivery of overarching ABRA vision and to assist in securing a successful route to market	ABC, HIE, renewable developers, LES, CES, SDS	Ongoing



Powering our community





## Powering our community

## **GRID UPDATE**

**INVERARAY - CROSSAIG** 

NORTH ARGYLL

RIIO -T2 BUSINESS PLAN







# TACKLING CLIMATE CHANGE OPPORTUNITES



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- INCREASE OPPORTUNITY FOR COMMUNITY OWNERSHIP OF COMMERCIAL ONSHORE WIND SITES
- POTENTIAL TO EXPAND ABRA REMIT TO INCLUDE ENERGY
- LOCAL ENERGY SYSTEMS/NETWORKS TO OVERCOME GRID CAPACITY CHALLENGES
- POTENTIAL OFFSHORE WIND PROJECTS SECURING MAXIMUM ECONOMIC BENEFIT
- FUTURE WAVE AND TIDAL PROJECTS SECURING MAXIMUM ECONOMIC BENEFIT

ARGYLL AND BUTE COUNCIL

CLIMATE CHANGE ENVIRONMENTAL ACTION GROUP

**COMMERCIAL SERVICES** 

**16<sup>th</sup> JANUARY 2020** 

#### **EXTERNAL ENGAGEMENT**

#### 1.0 EXECUTIVE SUMMARY

#### **Purpose**

- 1.1 Discussions within the Short Life Working Group (SLWG) have already touched upon the importance of partnership and shared vision to deliver climate change and environmental improvements for our area. The Council's direct activities are only 1 piece of the jigsaw to addressing the causes and preparing for impacts of climate change. Therefore, it is essential to identify and effectively engage with key stakeholders in our journey and to assist us in efforts to de-carbonise Argyll and Bute. An example list of potential stakeholders is contained at **Appendix A**.
- 1.2 This report aims to stimulate discussion around external engagement relating to climate change.

#### Recommendation

That the SLWG:-

- 1. Discuss and identify the range of stakeholders that may contribute to activities of the SLWG for Climate Change and Environmental Action;
- 2. Agree any specific engagement priorities; and
- 3. Agree to list any stakeholders or groups that are to be invited to future SLWG meetings.

Cllr Aileen Morton, Strategic Lead for Commercial Services & Priority Projects Douglas Hendry, Executive Director with responsibility for Commercial Services Ross McLaughlin, Head of Commercial Services

7<sup>th</sup> January 2020

## APPENDIX A – EXAMPLE LIST OF EXTERNAL STAKEHOLDERS FOR ENGAGEMENT

Windfarm & Renewable Operators	Utilities – power, water, communications	Local Construction Business	Local Transport Business
Waste Operators	Recycling Groups	Agricultural Business	School Groups
Other Local Authorities	Other Public Bodies (SNH, HIE, NHS etc)	Community Council's	Community Planning Partnership
COP26 – Workshop (via COHI Group)	Local Timber Business	Local Aquaculture / Marine Business	Tourism Business
Social Landlords	Local House Builders	Ferry Operators	Food & Drink Business
Community Groups	Youth Groups	Chambers of Commerce	Local digital and technological Business
Further education sector	Climate Change Consultants / Speakers / Advisors	Biodiversity Groups	Argyll & Islands Countryside Trust (ACT)

#### **CLIMATE CHANGE ENVIRONMENTAL ACTION GROUP PLAN OF ACTIVITY**

ACTION	RESOURCE	TIMEFRAME
Council Policy		
Collate existing Council policy and corporate policy approach to address climate change matters for Members to note and consider;	All members of Climate Change Board including Economic Development, Procurement, Planning Department, Roads & Infrastructure, Property Services	January 2020
<ol> <li>Consider the implications/opportunities of Government policy and legislation in relation to addressing Climate Change;</li> <li>a. Respond to SG Consultation</li> </ol>	Climate Change Board	Ongoing Feedback from SG Consultation = January 2020
Note and consider the Council's annual climate change submission to Scottish Government and other performance indicators in compliance with the Climate Change Act;	Climate Change Board  Specific briefing notes on:-  • Waste / BMW Carbon Impacts;  • Renewable Energy Strategy & Windfarms	January 2020 Dage 35
Council Business		
Review the Action Plan and activities of the Climate     Change Board;	Climate Change Board	March 2020
Consider the establishment of a climate change fund for innovation or development.	Climate Change Board	June 2020
Endorse a new renewable energy sourcing strategy for Council assets (RSS2).	Property Services	August 2020
Climate Change Champion		$\omega$
7. Promote and champion the mitigation and adaption to the negative impacts of climate change, green investment in our region, sustainable development and resource	SLWG	Ongoing
<u> </u>	•	

ACTION	RESOURCE	TIMEFRAME
efficiency for the Council & the communities we serve.		
8. Encourage effective partnership working across all community planning partners in relation to the impacts of climate change;	SLWG and Community Planning	Item on agenda for discussion at December 2020 CPP management committee meeting then ongoing
<ol> <li>Promote Argyll and Bute as a low carbon area and to develop and seek additional investment for green infrastructure including renewables, environmental and biodiversity business to develop;</li> </ol>	Climate Change Board / Economic Development	May 2020
10. Identify, acknowledge and champion positive climate change projects carried out by (A) the Council (B) our CPP partners, (C) our communities (D) our businesses and others	Climate Change Board	June 2020
11. Development of a communications and engagement strategy around the impacts of climate change and how we intend to mitigate and adapt	Communications Team	March - August 2020
12. Recommended actions from the group are to be reported back to Full Council by August 2020	SLWG	August 2020

ARGYLL AND BUTE COUNCIL

CLIMATE CHANGE ENVIRONMENTAL ACTION GROUP

**COMMERCIAL SERVICES** 

**16<sup>th</sup> JANUARY 2020** 

## CONSULTATION ON THE ROLE OF THE PUBLIC SECTOR BODIES IN TACKLING CLIMATE CHANGE

#### 1.0 EXECUTIVE SUMMARY

#### **Purpose**

- 1.1 The purpose of this report is to update Members from their last SLWG meeting where we discussed the live Scottish Government Consultation titles 'Role of Public Sector in tackling Climate Change'. The consultation has now closed and representations were submitted from the Council's Climate Change Board. This report contains the response that has been submitted to the Scottish Government for consideration.
- 1.2 The closing date for submissions 4<sup>th</sup> December 2019 and the full response can be seen at **APPENDIX A**.

#### Recommendation

That the SLWG:-

1.2.1 Note the submission to the Scottish Government consultation

Cllr Aileen Morton, Strategic Lead for Commercial Services & Priority Projects Douglas Hendry, Executive Director with responsibility for Commercial Services Ross McLaughlin, Head of Commercial Services

#### For further information contact:

Ross McLaughlin, Head of Commercial Services

## APPENDIX A – CONSULTATION RESPONSE TO THE ROLE OF THE PUBLIC SECTOR IN TACKLING CLIMATE CHANGE

Q1. What additional training, information or guidance do you think Public Sector Bodies need to help them increase their action on climate change?

- Practical and operational information about how Climate Change and setting Zero net carbon targets relates to public sector business – specifically for Elected Members, Finance Directors, Senior Management Team, Heads of Property Services, Heads of Amenity Services (Waste Service) and Fleet Services;
- Funded qualification on 'Climate Solutions' is very much welcomed and would be interested in exploring whether Argyll and Bute could benefit by staff participation;
- Practical and operational guidance on how public sector can act as a leader / exemplar for wider society – climate change championing;
- Information and guidance on carbon offsetting like carbon capture, tree planting and bioenergy using practical examples and how local authorities can benefit from the existing land uses in their geographical area e.g. forestry (CBH)
- Forecasting on grid decarbonisation to assist target setting;
- Inform Corporate and Senior Management about those innovations and initiatives that have shown success in both mitigating and adapting to climate change. They should further be informed of the implications of their implementation in terms of disruption, costs, etc.
   Emphasis should be given to those innovations and initiatives that are transformational in achieving a low carbon society.
- Feedback on future prospects to sell/transfer exported electrical power "peer to peer" across the grid i.e. virtually, not private wire. (PG)
- An annual review of funding opportunities that public and third sector bodies can access to invest in/develop climate change. Related measures should be created and circulated annually. (PL)
- Make some kind of incentive financial or otherwise for local authorities to get proactively involved and to cause them to get their staff/public involved. (AMcC)
- We would be keen to see more information, training etc. available on the technical solutions which might come forward, we often seem to be learning as we go along when organisations come to us with projects. (Anna Watkiss)

## Q2. What are your views on the proposed structure for the High Ambition Climate Network of Chief Executives and Elected Members?

- Network is a positive step to support other strategic groups such as COSLA and Leaders
  Network. However, capacity and expertise is a challenge particularly for smaller public
  bodies who don't have dedicated Climate Change Officers / Teams such as Argyll and Bute;
- Rural and smaller public bodies present some key challenges and opportunities around net zero carbon targets like complicated waste and travel economies as well as offsetting options – it is important that both large, small, urban and rural Local Authorities are represented;
- Chief Executives and Elected Members are ultimately the controlling minds for delivering net-zero carbon, so the formation of the network and their inclusion is welcomed. (CBH)

Q3. Do you agree that Public Sector Bodies should be required to set targets for when they will achieve zero direct emissions, and for reduced indirect emissions?

- Yes. Ambitious yet achievable targets should be identified. Decarbonising of national grid
  plays key role in this and likely there should be grouping of public bodies with similar
  characteristics benchmarking groups. Also carbon credit trading has been practiced for
  many years between public bodies and there remains of interest for cross boundary /
  organisation working together to collectively reduce carbon
- Setting targets should provide an impetus to implement the type of transformative action required to achieve net zero emissions. Monitoring is also important to determine progress.
- The scale of the challenge for each target must be in proportion to the individual challenging circumstances of each authority for example consideration must be given to island and rural authorities reliant on ferry services and road haulage. (PL)
- Yes will all authorities actually be able to get to zero? (AMcC)

## Q4. Do you agree that Public Sector Bodies should report annually on how they use their resources to contribute to reducing emissions?

Yes. Achieving net zero will require transformative action and thereby significant resource.
Having to report on an annual basis on how resources are used to reduce emissions will help
place a focus on climate change action throughout an organisation. Reporting on what
steps are being taken to achieve the reduction will also ensure that the climate change
impact would become another metric for consideration (like Finance and Equality impacts)
during the policy development process. (PL)

# Q5. Do you agree that the details of what Public Sector Bodies are required to report on should be set out in statutory guidance instead of on the face of secondary legislation (otherwise known as an Order)?

• **Yes**. Statutory Guidance is more flexible than pursuing legislation. In this regard, it can respond quicker to changes such as new information, proposed improvements, etc.

## Q6. Do you agree to the proposed changes to the list of Public Sector Bodies that are required to annually report their emissions?

• Yes. Only those Public Bodies that have influence over their emissions, e.g. with their own buildings, fleet, etc., should be required to report. In this respect an annual review should be carried out to determine which bodies can be removed from; added to; amended on the list of reporting Public Sector Bodies. (CBH)

#### Q7. Do you agree with our proposals for amending the reporting requirements as set out above?

• Yes. The proposed amendments to the reporting requirements should reduce the difficulty of annual reporting and make reports less repetitive.

## Q8. Is there anything else you think should be added to the reporting duties, or anything else you think should be removed?

Case study or other examples of climate change innovation.

## Q9. Do you agree that Public Sector Bodies should each make their own report on emissions reductions publicly available?

Yes / no / don't know Please explain your answer.

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Yes. Transparency is important in encouraging action on climate change and making this a
priority. It further promotes continuous improvement and should reduce the bureaucracy
associated with information requests (CBH)

#### Other comments

The public sector also requires sufficient resources, support and power to implement the required changes. Finally, unless legislation starts to align with what are really just aspirational targets, and this is then followed by an appropriate resource, then LAs, or indeed any other public body, will be unable to deliver on the climate change agenda. For renewables in Argyll, there are issues such as grid capacity and Transmission Network Use of System (RNUoS) charges which impact on the viability and scale of projects which can be developed. Appropriate infrastructure, support and funding needs to be in place if local authorities are going to be able to contribute to climate change action.