



**arc21 RESIDUAL WASTE TREATMENT PROJECT –
POTENTIAL SITES FOR MBT AND EfW FACILITIES**

**Screening of Impacts on the Promotion of
Equality of Opportunity**

**In accordance with Section 75 of the
Northern Ireland Act 1998**

SCREENING REPORT

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1. Title of Policy

Residual Waste Treatment Project (potential sites for MBT and EfW facilities).

2. Brief Policy Description

The arc21 Waste Management Plan (adopted in 2003 and updated in 2007) identified a preferred scenario for waste collection, treatment and disposal which included the treatment of residual waste using mechanical biological treatment (MBT) and energy from waste (EfW). The Plan envisaged that implementing the preferred solution would require new MBT and EfW facilities to be established in partnership with the private sector.

As part of the Residual Waste Treatment Project, arc21 is following a best practice procurement process to identify the preferred private sector bidder to take forward the establishment of new waste management arrangements and development of the required infrastructure. The procurement process has now reached the stage where arc21 is in dialogue with the two remaining bidders and potential sites for MBT and EfW facilities are being discussed. Both arc21 and the bidders have put forward potential sites and three specific options are now being considered.

It is anticipated that the 11 constituent Councils of arc21 will make a decision on the preferred bidder in due course and that this will include a decision on the siting of MBT and EfW facilities. In order to ensure that the full equality implications of this decision can be taken into account by the Councils, in compliance with Section 75, arc21 is co-ordinating the screening of the three potential sites to identify any potential equality impacts. In line with best practice and ECNI guidance, the screening process is being undertaken at the earliest possible opportunity. However, it is anticipated that dialogue with local communities and consideration of impacts will continue throughout the procurement process.

3. Policy Aims

The principal objective of the Waste Management Plan (of which the Residual Waste Treatment Project is a component part) is to identify the options for managing waste within the arc21 region, which draws the right balance between:

- meeting strategic targets for reduction, recycling and recovery;
- the protection of the environment for present and future generations; and
- the provision and maintenance of sufficient disposal capacity and treatment capacity to deal with the waste produced.

4. How is the policy defined?

The policy is defined by the 11 member Councils of arc21.

5. Who are the relevant stakeholders?

The main stakeholders in relation to this screening process are considered to be:

- residents and businesses in the arc21 region (the 11 Local Government Districts);
- residents in the areas adjacent to the potential sites;
- potential employees during both the construction and operation phases.

6. Please list any related policies:

Northern Ireland Waste Management Strategy (2006);
arc21 Waste Management Plan (2003, updated 2007).

7. What information is available to assist screening?

7.1 Data analysis

Information from the 2001 Census has been used to identify some of the key characteristics of residents of the arc21 region and communities near to the potential sites in terms of Section 75 categories. Information has been analysed at Local Government District (LGD) and Super Output Area (SOA) levels; an SOA is a Census division consisting of approximately 2000 residents. It is acknowledged that this data was collected in 2001 and that there may have been significant

changes since that date. However, the Census remains the best source of information at small area level. The data is set out in detail in Appendix A.

The Census does not provide any information on political opinion or sexual orientation and information on disability is limited. The results of the 2005 Local Government Elections have been used as a proxy measure for political opinion, although it should be noted that there was a low turnout in certain electoral areas. These results are presented in Table 5 of Appendix A.

In addition some general data on the construction industry from the Construction Industry Council and the NI Labour Force Survey has been used to estimate potential impacts.

7.2 Available research

Reference has been made to published studies including –

- The Department of Environment, Food and Rural Affairs report on the comparative impacts on health of different methods of waste disposal, 2004;
- The World Health Organisation Transport, Health & Environment Pan European Programme, 2002;
- DEFRA National Emissions Inventory, 2006;
- PSNI Report on Pedestrian Casualties, 2006;
- EU Commission CALM studies, 2001;
- Report of the Belfast City Council consultation process, 2009

8. How will the policy be implemented?

It is anticipated that the 11 constituent Councils of arc21 will make a decision on the preferred bidder in due course and that this will include a decision on the siting of MBT and EfW facilities. Thereafter arc21 will work with the preferred bidder to develop and operate suitable residual waste treatment facilities.

9. What factors will facilitate implementation?

- Continuing dialogue with local communities.
- Good communication throughout the arc21 region.
- Specification of standards to ensure minimum impacts during the construction and operational phases.
- Effective use of licensing and regulatory controls.

10. What factors will hinder implementation?

- Delays associated with the planning process.

11. Is implementation undertaken with other bodies/organisations?

The Residual Waste Treatment Project is a collaborative initiative among the 11 constituent Councils of arc21 with involvement from the Department of the Environment and the Strategic Investment Board Limited. The preferred bidder will be responsible for the design, build, operation, maintenance and/or finance of the treatment plants. The 11 Councils will, of course, retain responsibility for meeting statutory equality duties.

12. What data will be required to assist monitoring of policy implementation?

- Monitoring of emissions including air quality, noise, dust and odour.
- Monitoring of increases in road traffic in areas local to the sites.
- Monitoring of research into health and safety issues.
- Continuing dialogue with local communities and other key stakeholders.

13. Background Information

Section 75 of the Northern Ireland Act 1998 (referred to below as 'Section 75') requires all designated public authorities carrying out functions in Northern Ireland to have due regard to the need to promote equality of opportunity –

- between persons of different
 - religious belief;
 - political opinion;
 - racial group;
 - age;
 - marital status;
 - sexual orientation;
- between men and women generally;
- between persons with a disability and persons without; and
- between persons with dependants and persons without.

Without prejudice to these obligations, public authorities are also required to have regard to the desirability of promoting good relations between persons of different religious beliefs, political opinion or racial group.

Schedule 9 of the Act sets out the detailed procedure for the implementation of these duties including the publication of Equality Schemes and the conduct of screening exercises and Equality Impact Assessments (EQIA) of policies.

Screening and EQIA are conducted in accordance with the guidance issued by the Equality Commission for Northern Ireland (ECNI); the relevant guidance currently in place includes –

- Guide to the statutory duties (February 2005);
- Practical guidance on equality impact assessment (February 2005);
- Promoting good relations – a guide for public authorities (October 2007);
- Monitoring guidance for use by public authorities (July 2007);
- Guidance on equality of opportunity and sustainable development in public sector procurement (May 2008); and

- Guide to the statutory duties (April 2010).

arc21 is a waste management group representing 11 Councils in the east of Northern Ireland: Antrim, Ards, Ballymena, Belfast, Carrickfergus, Castlereagh, Down, Larne, Lisburn, Newtownabbey and North Down. arc21 works on behalf of its member Councils to guide, support and help them meet their legal requirements and drive forward innovative waste management programmes.

Each of the constituent Councils is a designated public authority for the purposes of Section 75 and each has its own Equality Scheme. However, there is a high degree of commonality in the Equality Schemes and all Councils follow ECNI guidance in relation to the screening process. It should be noted that the ECNI has recently published revised guidance on the format of Equality Schemes and screening criteria; however, the ECNI has indicated that authorities should continue to apply the criteria in their current Equality Schemes until such time as revised schemes are published. Councils are expected to publish new schemes in 2012. This screening process has therefore been conducted in line with the criteria in the current published Equality Schemes.

This report sets out the preliminary findings of a screening exercise undertaken in respect of the potential sites for MBT and EfW facilities as part of the arc21 Residual Waste Treatment Project. The main purpose of this report is to identify those aspects which have the potential to address inequalities and deliver positive impacts for a number of Section 75 groups as well as those aspects which may give rise to adverse differential impacts.

At this early stage it is not possible to evaluate all the potential impacts for equality of opportunity and good relations which might arise during the course of the development of the required infrastructure; further details will become available as the procurement process and the subsequent contract implementation progress. However, the screening has taken account of the likely impacts on key stakeholders and aims to highlight issues which will need to be kept under review at later stages.

14. Potential impacts

In order to identify potential equality impacts it is necessary to identify those most likely to be affected by the Residual Waste Treatment Project and the types of impacts which they may experience. Preliminary conclusions can then be reached on the potential equality implications for different Section 75 groups. The key impacts arise from both the preferred approach to waste management and the siting of MBT and EfW facilities.

14.1 Potential impacts of the preferred approach to residual waste treatment

The principal objective of the Waste Management Plan is to identify the options for managing waste within the arc21 region, which draws the right balance between –

- meeting strategic targets for reduction, recycling and recovery;
- the protection of the environment for present and future generations; and
- the provision and maintenance of sufficient disposal capacity and treatment capacity to deal with the waste produced.

Failure to meet these objectives is likely to have direct impacts on residents and businesses in the arc21 region –

- failure to meet strategic targets for reduction, recycling and recovery would have direct adverse economic impacts through the imposition of penalties on Councils (as a result of the EU Landfill Directive); it is estimated that penalties would total approximately £177 million over the lifetime of the Waste Management Plan (2005-2010) if no action was taken by arc21 to address residual waste;
- failure to protect the environment could have adverse social impacts in terms of health, safety and quality of life;
- failure to provide sufficient disposal and treatment capacity could result in economic impacts because of the cost of procuring capacity elsewhere and in social and environmental impacts if waste were not disposed of in an effective manner.

14.2 Potential impacts of the siting of MBT and EfW facilities

The Waste Management Plan includes detailed information on the potential impact of MBT and EfW facilities in terms of site conditions, site setting, accessibility, landscape and visual impacts, nature conservation, water resources, air quality and environmental nuisance. The key issues for the screening process may be summarised as follows –

- **Increased road traffic:** Centralised waste facilities will most likely be served by large numbers of heavy goods vehicles with a potential impact on local roads and residents. arc21 will ensure that access to sites is properly managed and that bulk transport systems are used wherever possible to reduce the number of vehicles.
- **Visual intrusion:** An average MBT plant may have a height of 10-20m and an EfW plant may comprise buildings up to 40m high. In addition, the stack associated with some air clean up systems for mixed waste processing operations may be up to 80m high. All the proposed sites are remote with no adjacent housing but it is possible that residents in neighbouring communities may experience some visual intrusion. In particular, it is likely that the stack will be visible for some distance.
- **Air emissions:** Air emissions and health impacts for these types of facility are most likely to be linked to traffic movements and potentially bio-aerosols from biological processing. There has been extensive research in recent years on ways to control bio-aerosols and arc21 will ensure that best practice techniques are applied. Air emissions from the EfW process mainly include carbon dioxide and water and such facilities are highly regulated. Recent studies have shown that there is no consistent evidence of adverse health effects from emission from EfW facilities.
- **Dust and odours:** Dust and odours can be minimised by good building design and by performing all operations under controlled conditions indoors. Many mixed waste processing operations operate under negative pressure within

buildings to address this problem.

- **Noise:** The main contributors to noise disturbance are likely to be vehicles but waste handling procedures and the operation of fans can also cause noise intrusion particularly during the night, since operations take place 24 hours a day. Noise can be effectively addressed through the planning process and controlled under waste licensing regulations.

15. Screening Criterion 1: Is there any evidence of higher or lower participation or uptake by different groups?

This screening criterion considers whether policies are likely to impact differentially on any of the Section 75 groups because they are more or less likely to benefit from the facilities to be provided.

The implementation of the Residual Waste Treatment Project is designed to benefit all residents and businesses within the arc21 region equally. There will also be potential benefits to those employed in the construction phase and the small number of employees required to operate the plants. However, it is acknowledged that those situated within the immediate area around the site or sites which are eventually selected may consider that they are also likely to be adversely affected by the development and subsequent operation of the facilities.

In relation to Screening Criterion 1, the screening process has therefore considered the potential impact on Section 75 groups within –

- the residents of the arc21 region (the 11 Local Government Districts);
- residents in the areas adjacent to the three sites under consideration.

It is not possible to define the potential labour market for the construction and operation of the plants in the same level of detail as they may be drawn from across

Northern Ireland, Great Britain, the Republic of Ireland and other countries. However, there is some general data on the construction industry which has been used to estimate potential impacts.

Information from the 2001 Census has been used to identify some of the key characteristics of residents in terms of Section 75 categories. The data is set out in detail in Appendix A.

The Census does not provide any information on political opinion or sexual orientation and information on disability is limited. The results of the 2005 Local Government Elections have been used as a proxy measure for political opinion, although it should be noted that there was a low turnout in certain electoral areas. These results are presented in Table 5 of Appendix A and show that, in 9 of the 11 Council areas (excluding Belfast and Down) the highest percentage of votes cast in the 2005 election were for DUP candidates. In Belfast the highest percentage of votes were cast for Sinn Féin candidates and in Down for SDLP candidates.

There is no current source of data on sexual orientation by geographical location.

15.1 Residents of the arc21 region

Table 1 in Appendix A sets out information on the characteristics of residents of the arc21 region in terms of Section 75 categories for the purposes of comparison with the SOAs under consideration. In summary the data shows that:

- the majority of people are from a Protestant community background (63.6%);
- 23.6% of the population were under 16 years and 18.8% were over 60 years old on Census Day;
- the majority of people aged over 16 were married (54.4%);
- 20.4% of the population considered themselves to have a limiting long term illness;

- 33.7% of households included dependant children and 11.6% of the population stated that they provided some level of unpaid care.

It should be noted that all data corresponds closely to the totals for Northern Ireland as a whole.

15.2 Residents in the immediate area of Site A

Site A (Hightown Quarry) is a potential site for both an MBT and EfW facility. It is located in Clady SOA in Antrim LGD which has a very low population density (0.32 persons per hectare). The site is remote and currently in use for industrial processing; there is no adjacent housing (i.e. within 250m). The nearest area with a significant population density is Hightown itself, approximately 1 mile away, which stretches across two SOAs (Collinbridge 1 and Mallusk 2).

Table 2 in Appendix A sets out information on the characteristics of residents in these 3 SOAs in terms of Section 75 categories. In summary the data shows that:

- the Section 75 profile of Clady SOA corresponds fairly closely with that of the arc21 region as a whole;
- the majority of people in Clady SOA are from a Protestant community background and the majority in Collinbridge 1 and Mallusk 2 SOAs are from a Catholic community background;
- there is a low percentage of people aged 60+ in Collinbridge 1 and Mallusk 2 SOAs compared with the arc21 region as a whole;
- there is a high percentage of households with dependant children in Collinbridge 1 and Mallusk 2 SOAs compared with the arc21 region as a whole;
- the remaining data shows a reasonably close correspondence with the arc21 region as a whole.

15.3 Residents in the immediate area of Site B

Site B (Kilroot) is a potential site for both an MBT and EfW facility. It is located in Eden 1 SOA in Carrickfergus LGD which has a low population density (0.99 persons per hectare). The site itself is within an industrial complex located near the power station and there is no adjacent housing. The nearest area with a significant population density is Eden 2 SOA which is at the eastern edge of the town of Carrickfergus, approximately half a mile away.

Table 3 in Appendix A sets out information on the characteristics of residents in these 2 SOAs in terms of Section 75 categories. In summary the data shows that:

- the majority of people in both SOAs are from a Protestant community background and the percentages are significantly higher than in the arc21 region as a whole;
- there is a low percentage of people aged 60+ in both SOAs compared with the arc21 region as a whole;
- there is a low percentage of people with limiting long term illness in both SOAs (particularly Eden 1) compared with the arc21 region as a whole;
- there is a high percentage of households with dependant children in Eden 1 SOA compared with the arc21 region as a whole;
- the remaining data shows a reasonably close correspondence with the arc21 region as a whole.

15.4 Residents in the immediate area of Site C

Site C (Glenside Quarry) is a potential site for an MBT facility only. It is located in Collin Glen 1 SOA in Lisburn LGD which has a population density of 2.1 persons per hectare. Although the site is fairly remote, there are areas with high population densities within a 2 mile radius, the closest being in Glencolin SOAs 1-4 (about 1

mile away).

Table 4 in Appendix A sets out information on the characteristics of residents in these 5 SOAs in terms of Section 75 categories. In summary the data shows that:

- in Collin Glen 1 SOA, the majority of people are from a Catholic community background and there is a high percentage of young people and households with dependant children, compared with the arc21 region as a whole;
- in Glencolin 1 and Glencolin 2 SOAs the majority of people are from a Catholic community background and there is a high percentage of young people and households with dependant children, compared with the arc21 region as a whole;
- in Glencolin 3 SOA, the majority of people are from a Catholic community background;
- in Glencolin 4 SOA, the majority of people are from a Catholic community background and there is a high level of people with a limiting long term illness compared with the arc21 region as a whole;
- the remaining data shows a reasonably close correspondence with the arc 21 region as a whole.

15.5 Data on the construction industry

A report commissioned by the Construction Industry Council in May 2009 showed that, for the UK as a whole:

- women constitute just under 46% of the UK total workforce and 13.5% of the construction industry workforce;
- Black and Minority Ethnic (BME) groups constitute 5% of the UK total workforce and 2% of the construction industry workforce;

- 19% of the total working age population is disabled compared with 14% of the construction workforce.

The Labour Force Survey Religion Report (2007) showed that the construction industry in Northern Ireland employs approximately equal percentages of people from Catholic and Protestant community backgrounds.

16. Screening Criterion 2: Do different groups have different needs, experiences, issues and priorities in relation to this policy issue?

This screening criterion considers whether policies are likely to impact differentially on any of the Section 75 groups because they have specific needs in relation to the actions which are the focus of the policies.

As set out above, there are potential adverse economic, social and environmental impacts for residents and businesses in the arc21 region, if the Waste Management Plan is not implemented effectively. This would inevitably have a differential impact on vulnerable groups, particularly those in areas classified as suffering multiple deprivation. The NI Multiple Deprivation Measure 2010 showed that 54 of the 89 most deprived SOAs (i.e. the 10% most deprived) are in the arc21 region.

There are also potential adverse impacts for those living and/or working in the immediate area of MBT and EfW plants, particularly in terms of noise, traffic, air emissions, dust, odours and visual intrusion which can be summarised as impacts on health and quality of life.

The Residual Waste Treatment Project will also have an impact on employment, principally for those working in the construction industry in Northern Ireland. It is likely that some jobs will also be created during the implementation phase, but both MBT and EfW plants are highly mechanised.

16.1 Health impacts

16.1.1 Air emissions

There have been a number of studies which have identified links between emissions from incinerators and ill health but, in general, these have been conducted around older incinerators with less stringent emission standards than those which currently apply.

In 2004 the Department of Environment, Food and Rural Affairs (DEFRA) prepared a report on the comparative impacts on health of different methods of waste disposal. The report, which was undertaken by independent consultants and reviewed by the Royal Society, is the most extensive available in the field. It concluded that well managed, modern incinerators make only a very small contribution to local concentrations of air pollutants (including particles, dioxins and carcinogens). It stated that such small additions could have an impact on the health of those living close by, but such effects, if they exist, are likely to be very small and not detectable. Further studies undertaken since 2004 have reached similar conclusions.

16.1.2 Traffic

There is evidence that traffic is a major contributor to ill health, particularly as a result of air pollution. The World Health Organisation has conducted extensive research and shown that traffic has a major effect on respiratory and cardiovascular disease, particularly in children and elderly people. For example, children living near roads with heavy-duty traffic have twice the risk of respiratory problems as those living near less congested streets. (WHO, Transport, Health & Environment Pan European Programme, 2002).

DEFRA data (National Emissions Inventory, 2006) shows that 27% of national emissions of particulate matter (PM₁₀) arises from traffic.

Traffic also poses a threat to safety, especially to children and young people and older people. PSNI statistics for pedestrian casualties show that children and

young people under 16 (23.6% of the population) represent 34.4% of all casualties and that older people over 65 (13.3% of the population) represent 16.0% of all casualties. (PSNI Pedestrian Casualties in Northern Ireland, 2006).

16.1.3 Noise

Noise may also be a contributing factor to ill health. Studies by the EU Commission have shown that noise (including noise from road traffic), particularly at night, can seriously harm human health by disturbing sleep, causing cardiovascular effects and provoking changes in social behaviour. Again, children constitute the most vulnerable group. (EU Commission CALM studies, 2001).

16.2 Quality of life impacts

Obviously any major construction work can have short term effects on the quality of life of local residents. As explained above, noise, air emissions, dust and odours are all highly regulated and controlled within MBT and EfW plants so the key long term effects on local communities are probably increased traffic and visual intrusion. These are likely to affect all residents along access routes and within sight lines of the facilities with no Section 75 group suffering a differential impact. It should also be noted that all the proposed sites are within industrial zones and that Site B is adjacent to a power station which includes buildings of an equivalent height to the proposed facilities.

16.3 Employment impacts

The construction of MBT and EfW plants is a major undertaking and would provide employment for several hundred people for at least 12 months. As explained above, the construction industry in Northern Ireland tends to employ fairly equal numbers of people from Protestant and Catholic community backgrounds. However, there is evidence that the construction industry is under-represented in terms of women, Black and Minority Ethnic people and disabled people.

The DETI Labour Force Survey showed that approximately 10% of the Northern Ireland workforce was employed in the construction industry in 2008. The corresponding figure for the arc21 region is not available but is likely to be similar.

The Survey also showed that, in 2008, the percentage of people of working age who were economically active in the 11 Council areas ranged from 68.4% in Carrickfergus to 81.0% in Antrim and Castlereagh. The employment opportunities are therefore likely to benefit residents of the arc21 region, particularly males.

Once the plants are completed there may be some job opportunities although many posts will be specialised and MBT and EfW plants tend to be highly mechanised.

17. Screening Criterion 3: Have consultations with relevant groups, organisations or individuals indicated that policies of this type create problems that are specific to them?

17.1 Waste Management Plan

arc21 consulted extensively on the Waste Management Plan when it was developed in 2003 and when it was updated in 2007. The initial consultation included seeking views on a full Equality Impact Assessment. A number of responses were received outlining specific needs of people in particular Section 75 groups, but these related to waste collection methodologies only and not to the treatment of residual waste.

17.2 Belfast City Council

In 2009 Belfast City Council undertook a large scale consultation in respect of the potential to site MBT and/or EfW facilities at the North Foreshore. This included:

- a postal survey which generated 8358 responses;
- a series of 10 segmented focus groups (one with young people);
- an information webpage where people could provide views by e mail; and
- a series of informal information road shows staffed by Council employees.

The results showed that 93% of respondents supported making land at the North Foreshore available for the purposes of either an MBT or EfW plant, with the figures being slightly higher among men and young and older people. The main reasons

for support were the potential for both technologies to help with waste disposal problems and that the facilities would be better for the environment than other options. The main reasons for opposing the facilities were concerns about impact on air quality and concerns about flies and odour.

In the focus groups, there were repeated references to a desire for independent information about possible health risks and how these had been dealt with in other jurisdictions. No specific needs relating to any Section 75 group were highlighted in the consultation report.

17.3 Local communities

arc21 is committed to timely, open and meaningful consultation with all stakeholders in respect of the Residual Waste Management Project. As the procurement process progresses, arc21 will maintain good communications with communities most likely to be affected by the selection of sites for MBT and EfW facilities. Some preliminary discussions have already been held with community leaders in key residential areas and with local elected representatives.

In terms of political opinion, it should be noted that one political party (Sinn Féin) has expressed opposition to EfW and other forms of incineration on many occasions; other parties have expressed concerns about aspects of various waste disposal methods but tend to assess each case as it arises.

17.4 Section 75 umbrella groups

As part of the screening process, arc21 contacted a range of Section 75 umbrella groups and asked them to identify any specific needs of the people they represent in respect of the siting of MBT and EfW facilities. These groups included:

Age NI	Disability Action
An Munia Tober	Gingerbread NI
Cara Friend	MENCAP
Carers NI	NICEM
CAJ	MCRC
Children in NI	Rainbow Project

Chinese Welfare Association	Save the Children
Community Development & Health Network	Youthnet

The groups were not informed of the location of the potential sites as these were the subject of commercial confidentiality. Most organisations declined to answer, with two stating that insufficient information was available to enable them to make comments. The only substantive reply received was to the effect that the remoteness of the sites might make it difficult for those with caring responsibilities to seek employment there.

18. Screening Criterion 4: Regarding implementation of the policy, is there an opportunity to better promote equality of opportunity or good relations by altering the policy or by working with others in Government of the larger community?

The Residual Waste Treatment Project is a collaborative initiative among the 11 constituent Councils of arc21 with involvement from the Department of the Environment and the Strategic Investment Board Limited. arc21 is committed to open and meaningful consultation with all stakeholders throughout the process, including community and voluntary sector groups.

The equality implications of the Waste Management Plan were thoroughly assessed both when it was initially developed in 2003 and when it was updated in 2007. No further opportunities to better promote equality of opportunity or good relations by altering the policy or working with others in government or in the larger community have been identified as part of this screening process.

19. Please summarise the policy impact on the organisations' obligation to have due regard to the need to promote equality of opportunity (with particular reference to questions 1-4 above).

The findings of this screening process in relation to the Section 75 groups is summarised below.

19.1 Religious belief (community background)

Two of the proposed sites are in SOAs where the majority of people are from a Protestant community background and the third is in an SOA where the majority are from a Catholic community background. In relation to Sites A and C, the nearest residential communities are mainly Catholic whilst those nearest to Site B are mainly Protestant.

However, this kind of differential impact will be apparent whatever sites are considered because of the separation of communities in Northern Ireland. The actual effects of the construction and operation of MBT and EfW facilities will not have a differential impact on people because of their religious belief. All the sites are currently in use for industrial purposes and all are remote from residential communities.

19.2 Political opinion

The data on political opinion shows that, in 9 of the 11 Councils in the arc21 region the highest percentage of votes cast in the 2005 Local Government Elections were for DUP candidates.

Only one main political party (Sinn Féin) has consistently opposed thermal processing of residual waste.

19.3 Racial group

National data shows that people from a BME background are under-represented in the construction industry and may benefit less from job opportunities arising from the Project.

19.4 Age

Published research suggests that children and young people and older people are the most vulnerable groups in relation to the health impacts of air emissions, noise and road traffic and are also more at risk of road traffic accidents. In each of the communities nearest to the three sites there is a higher level of households with dependant children than in the arc21 region as a whole. None of these areas has a particularly high level of older people.

19.5 Marital status

There is no evidence that the Project will have any differential effect on people by reason of their marital status.

19.6 Sexual orientation

There is no evidence that the Project will have any differential effect on people by reason of their sexual orientation.

19.7 Gender

National data shows that women are under-represented in the construction industry and may benefit less from job opportunities arising from the Project.

19.8 People with/without disabilities

National data shows that disabled people are under-represented in the construction industry and may benefit less from job opportunities arising from the Project.

19.9 People with/without dependants

One consultee pointed out that the remoteness of the sites might make it difficult for people with caring responsibilities to take employment there.

20. Are there relevant groups that should be consulted at this time (with particular reference to question 3 above)?

20.1 arc21 is committed to open and meaningful consultation with all stakeholders throughout the process, including community and voluntary sector groups. It is considered that the current consultation arrangements are adequate.

21. On the basis of the answers given to the above (and with particular reference to questions 1 to 4) is the recommendation that the policy be subject to a full EQIA?

Yes: EQIA		No: No EQIA	No
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Please give reasons below for recommending /not recommending an EQIA:

The focus of this screening process is the likely effects on people living in the communities close to the proposed sites. Although there are some differences in the Section 75 profiles of those communities (particularly in terms of community background), the actual effects of the construction and operation of the MBT and EfW plants are likely to be minor. The key concerns are health and safety, particularly in terms of emissions from the plants and increased HGV traffic. Extensive independent research has shown that well managed, modern waste treatment plants make only a very small contribution to air pollutants and noise and that the effects on local people are unlikely to be detectable. The effects of increased HGV traffic may pose a greater risk, especially to vulnerable groups such as children and young people and older people. However, the sites under consideration are already in use for industrial processes and therefore generate substantial amounts of traffic.

arc21 appreciates the concerns of the public with respect to health and safety and will take every precaution, through the procurement process and beyond, to ensure that emissions, noise and traffic are properly managed and controlled. Particular attention will be paid to access routes and to methods of reducing HGV movements. arc21 will formulate comprehensive monitoring systems and require the preferred bidder to give proper attention to the impacts on local residents.

With regard to employment, arc21 will also try to ensure, through dialogue with the preferred bidder, that job opportunities are made available to local people and that under-represented groups are informed of suitable opportunities.

In these circumstances it is considered that an Equality Impact Assessment would not provide any additional significant evidence or result in any additional measures

and it is therefore recommended that an EQIA should not be undertaken. However, dialogue with local communities and elected representatives will continue throughout the Project and, if any further equality implications are identified at any stage, the recommendation may be revisited.

DATA ANALYSIS

The following tables set out the data analysis conducted for this screening exercise as follows-

Table 1: Section 75 data for the arc21 region

Table 2: Section 75 data for communities around Site A

Table 3: Section 75 data for communities around Site B

Table 4: Section 75 data for communities around Site C

Table 5: Political opinion – Local Government Election Results 2005

Data on local communities has been sourced from the 2001 Census. The source of the Census information is the Northern Ireland Statistics website: www.nisra.gov.uk and Crown copyright material is reproduced with the permission of the Controller of HMSO.

In Tables 2, 3 and 4 cells are highlighted to indicate significant differences from the arc21 region baseline figure –

 Figures which are significantly **higher** than the arc21 baseline (hot).

 Figures which are significantly **lower** than the arc21 baseline (cold).

 Figures which are approximately the same as the arc21 baseline.

Table 1: Section 75 data – arc21 region

Category	Group	Antrim	Ards	Ballymena	Belfast	Carrick-fergus	Castle-reagh	Down	Larne	Lisburn	Newtown-abbey	North Down	arc21 total
		LGD	LGD	LGD	LGD	LGD	LGD	LGD	LGD	LGD	LGD	LGD	LGD
Religious belief / community background	Catholic	38.6%	12.6%	21.0%	47.2%	8.7%	18.3%	61.9%	25.2%	33.4%	19.4%	12.6%	32.0%
	Protestant (& other Christian)	56.7%	82.5%	76.3%	48.6%	85.1%	76.9%	35.5%	71.7%	62.8%	76.2%	80.5%	63.6%
Gender	Male	50.1%	48.8%	48.7%	46.8%	48.4%	47.6%	49.5%	49.1%	48.7%	48.3%	48.2%	48.1%
	Female	49.9%	51.2%	51.3%	53.2%	51.6%	52.4%	50.5%	50.9%	51.3%	51.7%	51.8%	51.9%
Ethnic group	White	99.2%	99.4%	99.3%	98.6%	99.3%	98.6%	99.3%	99.6%	99.3%	99.0%	99.1%	99.0%
	BME	0.8%	0.6%	0.7%	1.4%	0.7%	1.4%	0.7%	0.4%	0.7%	1.0%	0.9%	1.0%
Age	Under 16	23.9%	21.3%	22.0%	21.7%	22.6%	27.1%	24.9%	21.8%	24.5%	21.7%	19.9%	22.3%
	17-24	11.9%	10.8%	11.3%	15.0%	11.2%	9.0%	12.5%	10.2%	11.9%	11.7%	11.0%	12.4%
	25-59	49.4%	49.2%	47.4%	43.6%	48.5%	42.7%	45.6%	48.2%	47.5%	47.7%	48.1%	46.5%
	60+	14.8%	18.7%	19.3%	19.7%	17.7%	21.2%	17.0%	19.8%	16.1%	18.9%	21.0%	18.8%
Marital status	Single	31.5%	26.7%	29.3%	41.3%	27.2%	27.0%	32.4%	28.7%	30.4%	28.7%	27.0%	32.6%
	Married	57.5%	60.3%	58.8%	44.6%	59.6%	59.9%	56.5%	57.9%	57.9%	58.8%	58.8%	54.4%
	Other	11.0%	13.0%	11.9%	14.1%	13.2%	13.1%	11.1%	13.4%	11.7%	12.5%	14.2%	13.0%
Disability	People with limiting long term illness	17.8%	19.4%	17.7%	24.2%	18.9%	19.4%	19.0%	19.0%	18.2%	19.1%	18.5%	20.4%
Dependants	Households with dependant children	38.9%	33.7%	35.1%	30.4%	35.9%	31.9%	39.8%	33.1%	38.6%	34.0%	31.3%	33.7%
	People providing unpaid care	10.0%	12.3%	9.7%	11.8%	11.4%	12.8%	11.0%	11.3%	11.4%	11.6%	12.7%	11.6%

Table 2: Section 75 data – Site A

Category	Group	Clady SOA	Collinbridge 1 SOA	Mallusk 2 SOA	arc21 total
Religious belief / community background	Catholic	24.7%	74.5%	53.5%	32.0%
	Protestant (& other Christian)	72.2%	22.8%	42.2%	63.6%
Gender	Male	50.4%	50.6%	50.5%	48.1%
	Female	49.6%	49.4%	49.5%	51.9%
Ethnic group	White	99.9%	98.8%	99.1%	99.0%
	Black & Minority Ethnic	0.1%	0.2%	0.9%	1.0%
Age	Under 16	24.0%	29.4%	29.5%	22.3%
	17-24	11.1%	12.2%	10.5%	12.4%
	25-59	50.2%	49.6%	52.5%	46.5%
	60+	14.7%	8.8%	7.5%	18.8%
Marital status	Single	27.6%	26.8%	30.1%	32.6%
	Married	64.6%	66.4%	64.1%	54.4%
	Other	7.8%	6.8%	5.8%	13.0%
Disability	People with limiting long term illness	13.6%	11.8%	9.8%	20.4%
Dependants	Households with dependant children	40.8%	52.1%	50.1%	33.7%
	People providing unpaid care	11.6%	10.3%	9.2%	11.6%

Table 3: Section 75 data – Site B

Category	Group	Eden 1 SOA	Eden 2 SOA	arc21 total
Religious belief / community background	Catholic	7.4%	5.3%	32.0%
	Protestant (& other Christian)	87.3%	87.4%	63.6%
Gender	Male	49.5%	49.7%	48.1%
	Female	50.5%	50.3%	51.9%
Ethnic group	White	99.8%	99.3%	99.0%
	Non-white	0.2%	0.7%	1.0%
Age	Under 16	29.9%	25.1%	22.3%
	17-24	9.6%	10.7%	12.4%
	25-59	52.2%	51.6%	46.5%
	60+	8.3%	12.6%	18.8%
Marital status	Single	21.8%	26.1%	32.6%
	Married	70.7%	63.8%	54.4%
	Other	7.5%	10.1%	13.0%
Disability	People with limiting long term illness	10.3%	14.9%	20.4%
Dependants	Households with dependant children	51.7%	41.1%	33.7%
	People providing unpaid care	10.7%	12.1%	11.6%

Table 4: Section 75 data – Site C

Category	Group	Collin Glen 1 SOA	Glencolin 1 SOA	Glencolin 2 SOA	Glencolin 3 SOA	Glencolin 4 SOA	arc21 total
Religious belief / community background	Catholic	95.7%	98.2%	97.1%	98.6%	98.5%	32.0%
	Protestant (& other Christian)	3.6%	1.0%	2.1%	1.0%	1.0%	63.6%
Gender	Male	45.3%	48.9%	47.7%	51.1%	47.6%	48.1%
	Female	54.7%	51.1%	52.3%	48.9%	52.4%	51.9%
Ethnic group	White	98.7%	99.7%	99.4%	99.3%	98.8%	99.0%
	Black & Minority Ethnic	1.3%	0.3%	0.6%	0.7%	0.2%	1.0%
Age	Under 16	41.8%	36.3%	31.2%	25.7%	26.0%	22.3%
	17-24	21.0%	12.4%	12.9%	17.3%	15.8%	12.4%
	25-59	31.5%	45.6%	45.9%	44.1%	41.1%	46.5%
	60+	5.7%	5.7%	10.0%	12.9%	17.1%	18.8%
Marital status	Single	43.5%	37.4%	41.2%	45.5%	43.8%	32.6%
	Married	47.6%	55.8%	50.1%	45.7%	43.5%	54.4%
	Other	8.9%	6.8%	8.7%	8.8%	12.7%	13.0%
Disability	People with limiting long term illness	20.3%	15.3%	25.8%	23.2%	30.6%	20.4%
Dependants	Households with dependant children	70.9%	61.5%	48.7%	44.8%	38.8%	33.7%
	People providing unpaid care	11.1%	10.4%	13.0%	11.8%	13.1%	11.6%

Table 5: Political opinion – Local Government Election Results 2005

	Antrim LGD	Ards LGD	Bally- mena LGD	Belfast LGD	Carrick- fergus LGD	Castle- reagh LGD	Down LGD	Larne LGD	Lisburn LGD	Newtown- abbey LGD	North Down LGD
Turnout	57.9%	52.3%	62.6%	61.4%	54.7%	59.4%	62.9%	n/a	60.9%	56.2%	54.8%
% votes cast for DUP	30.7%	52.4%	55.2%	25.8%	43.3%	46.5%	16.3%	35.0%	40.7%	43.9%	31.4%
% votes cast for UUP	23.8%	24.5%	21.6%	13.8%	18.0%	17.8%	17.3%	26.5%	22.7%	23.3%	21.5%
% votes cast for Alliance	6.9%	14.1%	1.5%	6.8%	23.2%	16.2%	2.1%	12.4%	9.2%	8.0%	16.0%
% votes cast for SDLP	20.5%	3.4%	10.4%	17.1%	0	12.0%	37.5%	9.2%	8.5%	6.1%	1.9%
% votes cast for Sinn Féin	14.8%	1.1%	7.6%	30.6%	0	1.5%	23.1%	3.8%	9.2%	5.9%	0