

Appendix A17.1: Key Materials and Waste Legislation

1 Introduction

- 1.1 Chapter 18 (Policies and Plans) and Appendix A18.1 (Planning Policy Context for Environmental Assessment) describes the planning policies and guidance from national to local level which are relevant to materials. An assessment of the compliance of the proposed scheme against all development plan policies relevant to this environmental topic is reported in Appendix A18.2 (Assessment of Development Plan Policy Compliance) with a summary overview provided in Section 18.4 (Assessment of Compliance) of the Policy and Plans assessment (Chapter 18).
- 1.2 The Materials Assessment contained within Chapter 17 has been largely based on the guidance contained within unpublished draft Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 6 HD212/11 Materials Chapter (Highways Agency, Scottish Government, Welsh Assembly Government and The Department for Regional Development Northern Ireland 2012), hereafter referred to as draft HD212/11. This appendix expands on this guidance, and the content of local devolved Scottish policy relevant to materials and waste management.
- 1.3 As set out in HD212/11 the following are the key strategies in regard to materials:
- Securing the Future - The UK Government Sustainable Development Strategy 2005; and
 - EU Sustainable Development Strategy – Renewed Strategy 2006.
- 1.4 Securing the Future – the UK Government Sustainable Development Strategy 2005 (H.M. Government 2005) presents the vision of a *'one planet economy'* and encourages businesses to consider the implications that sustainable consumption and production will have on their business models and product/service ranges. It further asserts that consumers today demand higher environmental and ethical standards from businesses and that those, *'that anticipate this trend and develop 'material light' goods and services will be best placed to benefit from these opportunities and to enhance their competitiveness'* (H.M. Government 2005, page 46).
- 1.5 The EU Sustainable Development Strategy sets out a single, coherent strategy on how the EU will more effectively live up to its long-standing commitment to meet the challenges of sustainable development. It recognises the need to gradually change our current unsustainable consumption and production patterns and move towards a better integrated approach to policy-making.
- 1.6 The above strategies identify the following priorities: sustainable consumption and production; climate change; and natural resource protection. The principle of achieving 'more with less' has been investigated as part of this assessment and has directly shaped the proposed mitigation.
- 1.7 In Appendix 4 of 'Understanding the Definition of Waste' (Scottish Environment Protection Agency (SEPA) 2006), SEPA set out a procedure for evaluating the full recovery of waste, and guidelines to determine when waste may cease to be waste. In 2013, approximately 6.2 million tonnes of waste was generated by construction and demolition compared to 2.4 million tonnes of waste generated by households. Scotland's 'Zero Waste Plan 2010' (Scottish Government 2010) sets out the Scottish Government's vision for a zero waste society. This describes a Scotland where all waste is viewed as a resource; waste is minimised; valuable resources are not disposed of to landfill; and a majority of waste is sorted, leaving a minimal volume of waste requiring treatment. To achieve this, the Plan sets out measures, including:
- development of a Waste Prevention Programme for all wastes, ensuring the prevention and re-use of waste is central to all of the Scottish Government's actions and policies; and
 - two new targets applying to all waste by 2025: 1) 70% recycled; and 2) a maximum of 5% sent to landfill.

- 1.8 The Waste Prevention Programme was published in October 2013 and is called ‘Safeguarding Scotland’s Resources – Blueprint for a More Resource Efficient and Circular Economy’ (Natural Scotland 2013). The Plan aims to cut 7% of all waste in Scotland by 2017 and 15% by 2025.
- 1.9 ‘Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013 to 2027’ (The Scottish Government 2013) reiterates the targets provided in the Waste Prevention Programme, however it also states the aim of recycling all waste with no landfill by 2050.
- 1.10 The following section expands on the content of local devolved Scottish policy relevant to materials assessment and waste management.

2 Key Waste and Materials Legislation

Scottish Government’s Special Waste Regulations (1996)

- 2.1 Some types of waste are harmful to human health, or to the environment, either immediately or over an extended period of time. These are called ‘hazardous wastes’, and they are defined by Article 3 (2) in the Waste Framework Directive (European Directive 2006/12/EC, as amended by Directive (2008/98/EC), hereafter referred to as the Waste Directive) (of which Annex II was replaced in December 2014 by Commission Regulation No 1357/2014) as ‘waste which displays one or more of the hazardous properties listed in Annex III’ of the revised directive. In Scotland these wastes are referred to as ‘special waste’, as defined in the Scottish Government’s Special Waste Regulations (1996). These regulations make provision for the handling of such waste and for implementing European Council Directive 91/689/EEC on hazardous waste.
- 2.2 As detailed in the Waste Directive, certain specified waste shall cease to be a waste, when it has undergone a recovery (including recycling) operation and applies with specific criteria to be developed in accordance with the following conditions:
- *‘The substance or object is commonly used for specific purposes;*
 - *A market or demand exists for such a substance or object;*
 - *The substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products; and*
 - *The use of the substance or object will not lead to overall adverse environmental or human health impacts.’*

Transport Scotland Corporate Plan (2017 to 2020)

- 2.3 Published in 2017, Transport Scotland’s Corporate Plan sets out how they propose to ‘support and advise Scottish Ministers on strategy and policy options for transport in Scotland and increase sustainable economic growth through the development of national transport projects” over the three-year plan period’ (Transport Scotland 2017).
- 2.4 One of the five high level objectives of the plan is to ‘Protect our environment and improve health’ and the plan further states that ‘Environmental Sustainability is at the heart of all of Transport Scotland’s activities’.
- 2.5 Transport Scotland invests approximately £900 million per year in transport related infrastructure and is therefore able to exert significant influence on the procurement of materials during the construction and maintenance of transport infrastructure. They have committed to ‘embed sustainable practices in our procurement activity’ in the effort to protect and enhance Scotland’s environment.

Climate Change (Scotland) Act (2009) (‘the Act’)

- 2.6 The Act sets out Scotland’s strategy for the reduction of greenhouse gas (GHG) (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride) and a transition

to a low carbon economy. Part 1 of the Act creates the statutory framework for greenhouse gas emissions reductions in Scotland by setting an interim 42% reduction target by 2020 relative to 1990 emissions levels, with the power for this to be varied based on expert advice, and an 80% reduction target for 2050 (also relative to 1990 emissions).

- 2.7 Part 4 of the Act places duties on public bodies (including Transport Scotland) in relation to climate change. These duties require that a public body must, in exercising its functions, act in a way that is best calculated to contribute to the delivery of emissions reductions targets (termed climate change 'mitigation'), assists in the delivery of statutory climate change adaptation programmes and is considered to be the most sustainable. In the case of Transport Scotland, this includes delivering infrastructure projects sustainably in line with the Scottish Government's aim to achieve 'Almost complete decarbonisation of road transport by 2050 with significant progress by 2030 through wholesale adoption of electric cars and vans, and significant decarbonisation of rail by 2050' as stated on page 29 of the Climate Change Delivery Plan 2009.

Scotland's Zero Waste Plan (2010)

- 2.8 Scotland's Zero Waste Plan (Scottish Government 2010) outlines a strategy for a zero waste society which in turn will help to achieve the targets set out in the Climate Change (Scotland) Act (2009) of reducing Scotland's (GHG) greenhouse gas emissions by 42% by 2020 and 80% by 2050.

- 2.9 The Plan's objectives relative to materials and waste have been summarised below:

- Eliminating the unnecessary use of primary materials, leading to further reductions in GHG emissions in areas such as mining of raw materials, manufacturing, and transport. Financial savings are also made through recycling and recovering value from materials.
- Producing energy savings from the manufacture of products from recycled materials in preference to raw materials.
- Construction and demolition waste are highlighted as an area in which future policy can be developed to support higher targets and recovery levels in this area. This is proposed to be achieved through the collection of more robust data on these waste types, their composition and their waste management methods.

- 2.10 Furthermore, in relation to the use of materials, the Plan's vision is to: 'Reduce Scotland's impact on the environment, both locally and globally, by minimising the unnecessary use of primary materials, reusing resources where possible, and recycling and recovering value from materials when they reach the end of their life' (Scottish Government 2010, page 3).

The Highland Council Waste Management Strategy (2009)

- 2.11 The Highland Council and Moray Council work closely in the area of waste management and produced a joint Waste Strategy Report in 2009 (The Highland Council and Moray Council 2009) to identify services and treatment facilities that would be required to achieve their respective waste targets (note that the proposed scheme does not fall within the jurisdiction of Moray Council). The chosen option comprised the development of three efficient recovery of energy from waste (EfW) plants in Highland, one in Moray and in-vessel composting (IVC). After the adoption of Scotland's Zero Waste Plan in 2010 and the introduction of The Waste (Scotland) Regulations 2012, both Councils reviewed their strategies to ensure that their services and treatment facilities were in line with the revised legislation.

- 2.12 The Highland Council issued an 'Update on Waste Strategy' in 2014 (The Highland Council 2014) which presented a business case in support of the approval previously given in 2009 for three appropriately sized and sited EfW facilities in Skye, Caithness and Inverness. However, in a further 'Update on Development of Waste Management Strategy for The Highland Council' issued in 2017 (The Highland Council 2017), it was recommended that treatment of waste within a centrally located facility in the Highlands to create refuse-derived fuel (RDF) for export to the Central Belt, north of England or Mainland Europe may be a preferable option. This option would be significantly cheaper than the three EfW plants. From 1st January 2021, landfill operators in Scotland will be prohibited from accepting Biodegradable

Municipal Waste (BMW) for disposal at any landfill site. At the meeting of the Environment, Development and Infrastructure (EDI) Committee on 17th May 2018, it was agreed that a Materials Recovery Facility (MRF) would be established in the Inner Moray Firth area as the Council's preferred interim arrangement for meeting the requirements of the forthcoming BMW ban.

The Strategic Transport Projects Review (2008)

- 2.13 The Strategic Transport Projects Review (STPR) Strategic Environmental Assessment (SEA) (Jacobs, Faber Maunsell, Grant Thompson and Tribal Consulting 2009) has developed a series of strategic environmental assessment objectives for the STPR which includes the following relevant to this assessment:
- *'Make prudent use of natural resources such as minerals and aggregates in the improvement of transport infrastructure'; and*
 - *'Minimise waste by re-using and recycling materials where possible in the construction of transport infrastructure'.*
- 2.14 The STPR SEA also presents the findings of a bespoke sustainability appraisal on the STPR Key Strategic Outcomes (KSOs) to illustrate how these conform to overall Scottish sustainability aspirations:
- KSO1: Improved Journey Times and Connections;
 - KSO2: Reduced Emissions; and
 - KSO3: Improve Quality, Accessibility and Affordability.
- 2.15 KSO2: Reduced Emissions sets out to tackle the issues of climate change, air quality and health improvement. Recognising the challenges of reducing emissions, the overall objective for the transport network is to adopt a stepped approach to reducing transport emissions towards 2050:
- reduce CO₂ emissions per person km;
 - stabilise total CO₂ emissions; and
 - reduce CO₂ emissions in line with expectations from the emerging Climate Change Bill (60% reduction by 2020 / 80% reduction overall by 2050).

Limitations to Assessment

- 2.16 Baseline conditions reported in this study are informed by site walkover information. During the January 2018 site surveys moderate flow levels were observed following recent rainfall.
- 2.17 This assessment has been based on the DMRB guidance, along with Good Practice Guides from SEPA.
- 2.18 Informed assessments of the potential impacts of the operation and construction of the proposed scheme upon the sediment regime for each watercourse is based on the existing baseline conditions. Modelling had been previously scoped out of the assessment.
- 2.19 All watercourses potentially impacted by the proposed scheme were surveyed over a minimum 500m reach length as centred on the proposed crossing point. Where watercourses were considered to be more sensitive to potential impacts, the survey length was extended to 1km. Survey extents depended on the availability of land access.

3 References

Reports and Documents

Highways Agency. (unpublished 2012). DMRB Volume 11, Section 3, Part 6 HD 212/11 "Materials" Draft, 2015. The Highways Agency, Scottish Executive Development Department, The National Assembly for Wales and The Department of Regional Development Northern Ireland.

H.M. Government (2005). Securing the Future – the UK Government Sustainable Development Strategy 2005.

Jacobs, Faber Maunsell, Grant Thornton and Tribal Consulting (on behalf of Transport Scotland) (2009). Strategic Transport Projects Review: Strategic Environmental Assessment (SEA) Final Report.

Moray Council (2015). Moray Local Development Plan 2015.

Scottish Government (1996). Special Waste Regulations (1996).

Scottish Government (2009). Climate Change Delivery Plan 2009.

Scottish Government (2010). Scotland's Zero Waste Plan 2010.

Scottish Government (2013a). Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013 – 2027.

Scottish Government (2013b). Safeguarding Scotland's Resources – Blueprint for a More Resource Efficient and Circular Economy.

SEPA (2006). Guidance for SEPA Staff, Is it Waste: Understanding the definition of Waste (WML-G-DEF-01).

The Highland Council (2012). Highland-wide Local Development Plan (HwLDP), 2012.

The Highland Council (2014). Update on Waste Strategy Report by Director of Community Services, Community Services Committee, Agenda Item 10, Report No COM 36/14. 6th November 2014.

The Highland Council (2017). Update on Development of Waste Management Strategy for The Highland Council, by Director of Community Services, Environment, Development and Infrastructure Committee, Agenda Item 23, Report No EDI 22/17. 8th November 2017

The Highland Council (2018). Minutes from Environment, Development and Infrastructure Committee, 17th May 2018.

The Highland Council and Moray Council (2009). Joint Waste Strategy Report, 2009.

Transport Scotland (2017). Transport Scotland Corporate Plan (2017 to 2020).

EU Directives and Legislation

European Council (1991). Council Directive on hazardous waste (Council Directive 91/689/EEC)

European Commission (2006). Waste Framework Directive (European Directive 2006/12/EC, as amended by Directive (2008/98/EC)