

CARBON ASSESSMENT OF THE 2017-18 DRAFT BUDGET



Scottish Government
Riaghaltas na h-Alba
gov.scot

CARBON ASSESSMENT OF THE 2017-18 DRAFT BUDGET

Table of Contents

Foreword	2
1. Introduction	3
1.1. Scope of Assessment	3
1.2. Key Results	4
1.3. Budget Context	4
2. High-level Carbon Assessment of 2017-18 Draft Budget	6
2.1. Portfolio Expenditure and Associated Emissions	6
2.2. Emissions by Industry Source	8
2.3. Domestic and Imported Emissions	9
Annex A – Methodology	11
Annex B - Detailed Tables	12

Foreword



Sustainability is at the core of the Scottish Government's Purpose, of focussing government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. We are proud of and remain dedicated to delivery of our ambitious climate change targets of reducing emissions by 42% by 2020 and by 80% by 2050, as set in our world-leading Climate Change (Scotland) Act, 2009. We will publish our Climate Change Plan in January 2017, setting out measures out to 2032 allowing us to meet these targets.

This Carbon Assessment of the Draft Budget contributes to our Purpose and demonstrates our commitment to tackling climate change by highlighting the greenhouse gas implications of Government spending plans over 2017-18.

The Carbon Assessment should be read alongside the Second Report on Proposals and Policies (RPP2), which sets out specific measures that can deliver the emission cuts needed to achieve our statutory targets out to 2027.

A handwritten signature in black ink, appearing to read 'D Mackay', written in a cursive style.

Derek Mackay, MSP

Cabinet Secretary for Finance and the Constitution

1. Introduction

1. This assessment is based on the expenditure data presented in the 2017-18 Draft Budget and fulfils the statutory requirement under Section 94 of the Climate Change (Scotland) Act 2009 to report upon the emissions impact of expenditure proposals.

1.1. Scope of Assessment

2. The assessment of the Draft Budget captures solely the emissions associated with Scottish Government's purchase of goods and services. It is a consumption-based measure that covers direct emissions (including emissions from space heaters in Government buildings) and indirect emissions (supply side impacts, such as the production of gravel for roads constructed by the Government or generation of electricity, which is then used by Government). It also includes any imported emissions that are generated in producing the direct and indirect goods and services that Government purchases.
3. The methodology for the Carbon Assessment of the Draft Budget is high level in nature, and thus best applied to portfolio spending and budget expenditure as a whole. This assessment allows the Scottish Government to place the carbon impact of its use of good and services within the wider context of the national and global economy. It helps raise awareness of the carbon impact of spend in different areas, by identifying direct emissions and those from supply-side inputs.
4. The assessment does not, however, take account of 'second-round' emissions; while we do include emission impacts associated with Government spend and its supply chain, we do not count the emissions or savings associated with all of the outcomes arising from Government spending. For example, while the emissions associated with manufacturing and installing insulation are included, we do not count the carbon that may be saved in future as a result of making that improvement to the housing stock.¹
5. In order to better understand the complete picture on emissions associated with Government spend on goods and services, this assessment needs to be read alongside the analysis contained in the Second Report on Proposals and Policies², which sets out measures, out to 2027, for meeting the 2050, interim and annual targets in the Climate Change (Scotland) Act. Government will publish Scotland's Climate Change Plan in January 2017, setting out measures for achieving emissions reductions required to meet our 2050, interim and annual targets, covering the period to 2032.

¹ For the reasons behind the adoption of this approach please see Section 1.5 of the 2010-11 assessment (<http://www.gov.scot/Publications/2009/09/17102339/0>).

² <http://www.scotland.gov.uk/Publications/2013/06/6387/0>.

6. The Environmental Input-Output model and methodology underpinning the Carbon Assessment of the Draft Budget remain the same as for the Carbon Assessment of the 2016-17 Draft Budget but use the latest available Greenhouse Gas emissions ratios and HM Treasury deflators.

1.2. Key Results

7. Following the approach set out in section 1.1, it is estimated that total emissions attributed to the Draft 2017-18 Budget amount to 8.8 million tonnes (Mt) CO₂-equivalent. Applying the updated GHG emissions ratios and HMT deflators to the 2016-17 Draft Budget also shows an emissions total of 8.8 MtCO₂-equivalent.
8. Emissions remain flat relative to the 2016-17 Draft Budget, while spending has risen, as expected higher Agriculture related income from the EU has resulted in less direct funding for Agriculture from the Scottish Government Draft Budget, effectively moving Scottish Government spend to less greenhouse gas-intensive areas.
9. Details on the various sources of emissions show that some 36 per cent of the Scottish Government's carbon footprint is caused by the use of energy, water and waste, followed by manufacturing (22 per cent) and transport and communication (15 per cent).

1.3. Budget Context

10. The Draft Budget for 2017-18 contains details of Total Managed Expenditure (TME) of £38 billion across portfolio areas. Expenditure is split between resources and capital expenditure within the Departmental Expenditure Limit (DEL) and Annually Managed Expenditure (AME). This is illustrated in Table 1. Total Managed Expenditure was £37.1 billion across portfolio areas in the 2016-17 Draft Budget.

Table 1: Total proposed spending plans for 2017-18

	DEL Resource	DEL Capital	DEL total	AME	Total Managed Expenditure
	£m	£m	£m	£m	£m
2017-18 Draft Budget					
Health and Sport	12,717.8	408.1	13,125.9	100.0	13,225.9
Finance and the Constitution	172.5	2.0	174.5	3,406.4	3,580.9
Education and Skills	2,674.5	171.4	2,845.9	443.0	3,288.9
Justice	2,488.8	91.5	2,580.3	-	2,580.3
Economy, Jobs and Fair Work	246.9	137.7	384.6	-	384.6
Communities, Social Security and Equalities	6,991.4	1,485.1	8,476.5	2,605.8	11,082.3
Environment, Climate Change and Land Reform	164.2	142.8	307.0	-	307.0
Rural Economy and Connectivity	1,458.8	1,407.8	2,866.6	-	2,866.6
Culture, Tourism and External Affairs	292.8	32.0	324.8	-	324.8
Administration	179.5	13.1	192.6	-	192.6
Crown Office and Procurator Fiscal Service	107.5	3.6	111.1	-	111.1
Scottish Government	27,494.7	3,895.1	31,389.8	6,555.2	37,945.0
Scottish Parliament and Audit Scotland	102.0	1.2	103.2	-	103.2
Total Scotland	27,596.7	3,896.3	31,493.0	6,555.2	38,048.2

Summary

It is estimated that total emissions resulting from the 2017-18 Draft Budget will be 8.8 Mt CO₂-equivalent.

This assessment indicates that the amount of carbon for each pound of expenditure across the different areas of Government spending does not vary greatly.

'Second-round' emissions that may result from Government spending and the *use* of public goods and services, whether beneficial in terms of reducing emissions (e.g. spending on energy efficiency or afforestation) or negative in terms of increasing emissions (e.g. road use) are not captured.

Alongside this analysis of the carbon impact of the Draft Budget, the Scottish Government will continue to use additional assessment methods to improve understanding of the emission impacts of both Government expenditure and policies.

An assessment of the impacts of the Government's emission abatement measures can be found in the Second Report on Proposals and Policies. The Government's Climate Change Plan (setting out measures out to 2032 for achieving our climate change targets) will be published in January 2017.

2. High-level Carbon Assessment of 2017-18 Draft Budget

2.1. Portfolio Expenditure and Associated Emissions

11. Total estimated emissions attributable to the 2017-18 Draft Budget are 8.8 Mt CO₂-equivalent. Table 2 shows overall spend and emissions by the individual portfolios and further, how these emissions arise. Emissions remain broadly proportional to spend, except for Rural Economy and Connectivity, where emissions per unit of spend are slightly higher. Communities, Social Security and Equalities, Health and Sport, and Rural Economy and Connectivity are the largest Draft Budget items, with the highest emissions.

12. Expenditure is shown net of income, in line with the Draft Budget, and emissions are calculated on that basis.³

Table 2: Portfolio expenditure⁴ (TME excluding non-cash items) and emissions

Portfolio	Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)			Total
		Domestic		Imported	
		Direct	Indirect		
Health and Sport	£12,772	358.3	782.5	1,347.7	2,488.5
Finance and the Constitution	£3,579	8.7	238.1	340.9	587.7
Education and Skills	£3,162	89.6	144.9	319.0	553.4
Justice	£2,437	95.3	172.5	293.1	560.9
Economy, Jobs and Fair Work	£373	13.5	26.5	53.6	93.5
Communities, Social Security and Equalities	£11,082	855.5	767.5	1,330.0	2,953.0
Environment, Climate Change and Land Reform	£286	11.0	24.6	45.0	80.6
Rural Economy and Connectivity	£2,671	565.2	271.5	534.8	1,371.5
Culture, Tourism and External Affairs	£305	8.9	29.6	30.9	69.5
Administration	£178	7.3	13.2	22.6	43.1
Crown Office and Procurator Fiscal Service	£107	4.4	7.9	13.4	25.7
Scottish Parliament and Audit Scotland	£91	3.6	6.4	10.9	20.9
Total	£37,043	2,021.4	2,485.2	4,341.7	8,848.3

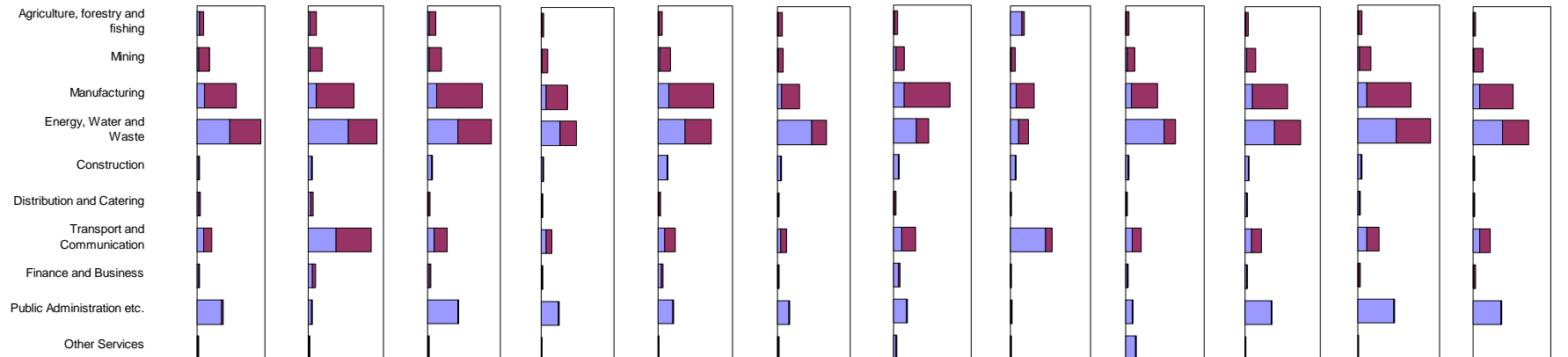
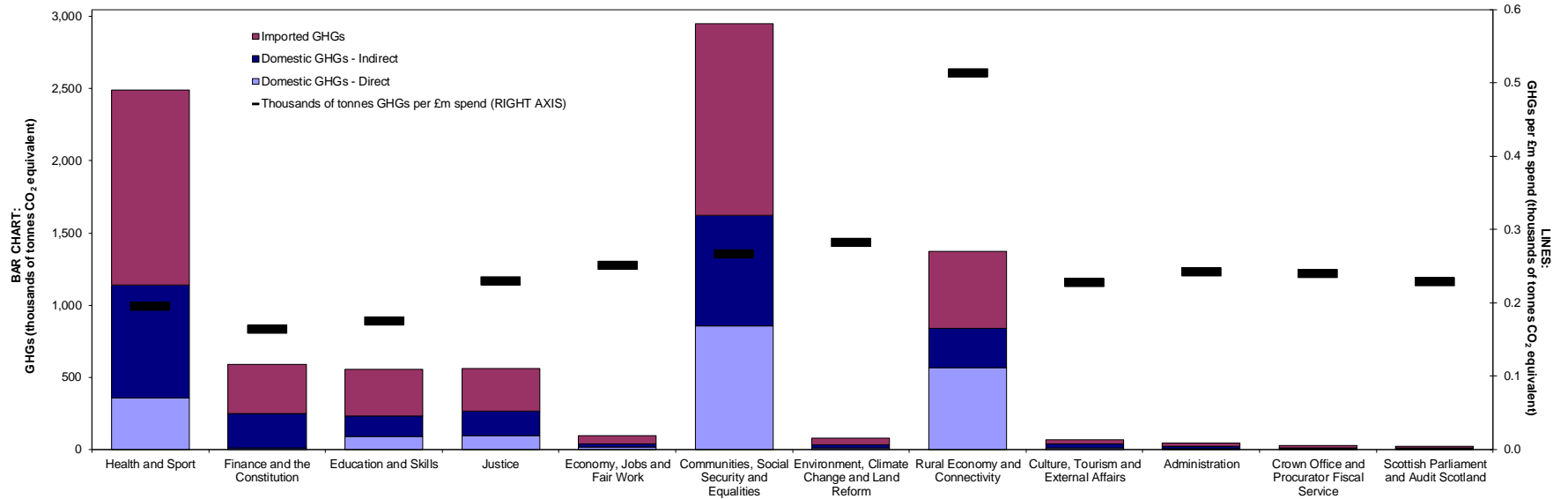
13. Direct emissions account for 23 per cent of the total; indirect emissions for a further 28 per cent – a large proportion of which is caused by electricity generation. 49 per cent of emissions attributable to Draft Budget expenditure are generated outside Scotland and are embedded in imported goods and services.

14. Figure 1 demonstrates graphically the results for individual portfolios and the split by type of emissions (direct/indirect), and also whether the emissions are domestic or imported. As the graph highlights, the emissions intensity (carbon emissions per pound of spend) of individual portfolios are broadly similar. The exception is Rural Economy and Connectivity, where the emissions intensity of spend is higher. A large part of this expenditure is linked to carbon-intensive production methods (carbon sequestration through forestry is not taken into account). Note that in the second part of Figure 1, the scales vary by portfolio.

³ See Annex B for a fuller discussion of this issue.

⁴ Non-cash items are excluded from the assessment where they do not lead to extra demand for goods and services. Because these items are excluded, the Draft Budget total shown here is lower than that in the Draft Budget itself, and lower than in Table 1.

Figure 1: Estimated domestic and imported GHG emissions (thousands of tonnes of CO₂ equivalent) by portfolio and generating industry.
Scottish Government Draft Budget 2017/18

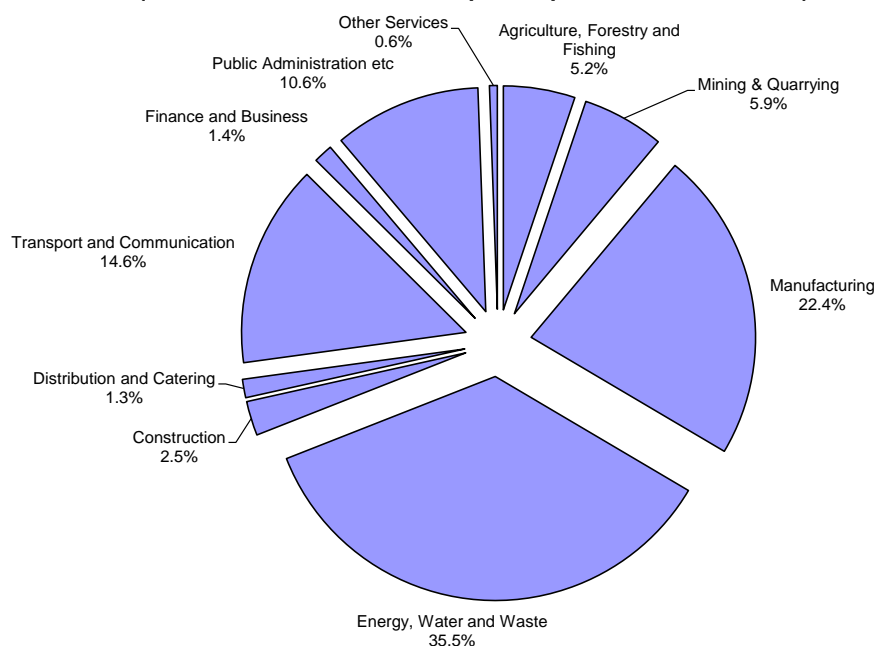


Domestic (direct and indirect) and imported GHG emissions (thousands of tonnes of CO₂ equivalent)

2.2. Emissions by Industry Source

15. Figure 1 confirms the continued importance of domestic energy production and its emissions across the Scottish Budget. In addition to this, for Rural Economy and Connectivity, the support of farming activity leads to significant levels of methane and nitrous oxide emissions.⁵
16. Total emissions broken down by industry are shown in Figure 2. Some 36 per cent of the Scottish Government's carbon footprint is caused by the use of energy, water and waste, followed by manufacturing (22 per cent) and transport and communication (15 per cent).

Figure 2: Overall Government spending - Industry sector share of emissions (domestic direct and indirect, plus imported GHG emissions)



17. To reduce the emissions from Government spending, decarbonisation of the energy sector remains an important policy aim. As the sector is decarbonised, the carbon intensity of the sector in the Environment Input-Output model will fall, with a consequential reduction in carbon emissions recorded in the use of electricity⁶.

⁵ This methodology excludes impacts upon carbon dioxide from affecting soils – e.g. ploughing, planting, woodland sequestration. The carbon footprint for the Rural Affairs, Food & Environment portfolio does not include the emissions relating to spending financed by EU funds because the Draft Budget only shows net expenditure i.e. expenditure that is not funded through sources of income like EU funds.

⁶ This assessment does not take into account the impact of the EU Emissions Trading Scheme (EU ETS).

2.3. Domestic and Imported Emissions

18. In addition to direct and indirect domestic emissions, the assessment takes into account the emissions generated outside of Scotland in the production of imported goods purchased as a result of Government spending (e.g. food, machinery, IT equipment).
19. Figure 3 demonstrates that imported emissions make up almost half of emissions from Draft Budget spend. There is however a clear difference between the sources of domestic and imported emissions. Expenditure on energy, water and waste accounts for the largest share of domestic emissions, while expenditure on manufacturing generates the largest share of imported emissions.

Figure 3: Domestic and Imported Emissions - All portfolios

Figure 3a: Domestic emissions by industrial sector

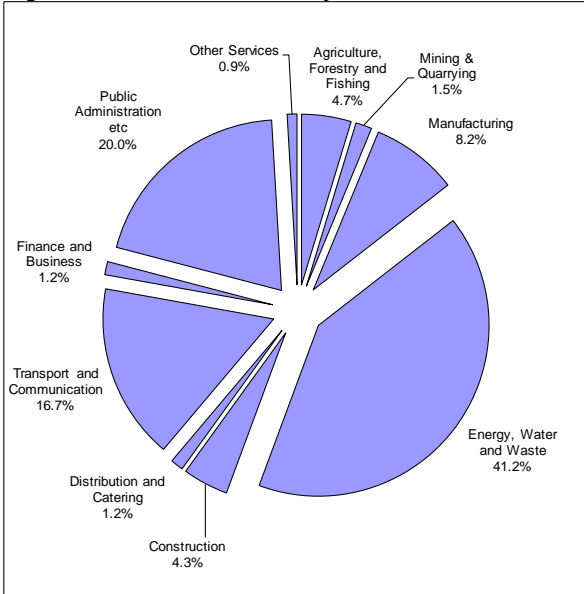


Figure 3b: Imported emissions by industrial sector

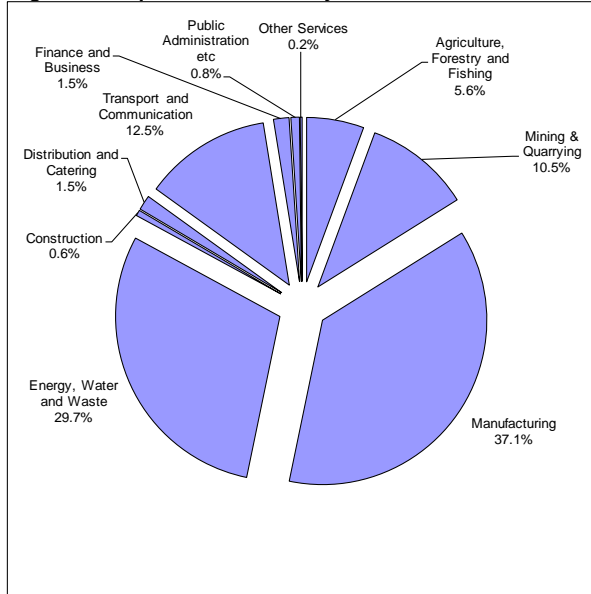


Figure 3c: Domestic and imported emissions, thousands of tonnes of CO₂ equivalent and percent

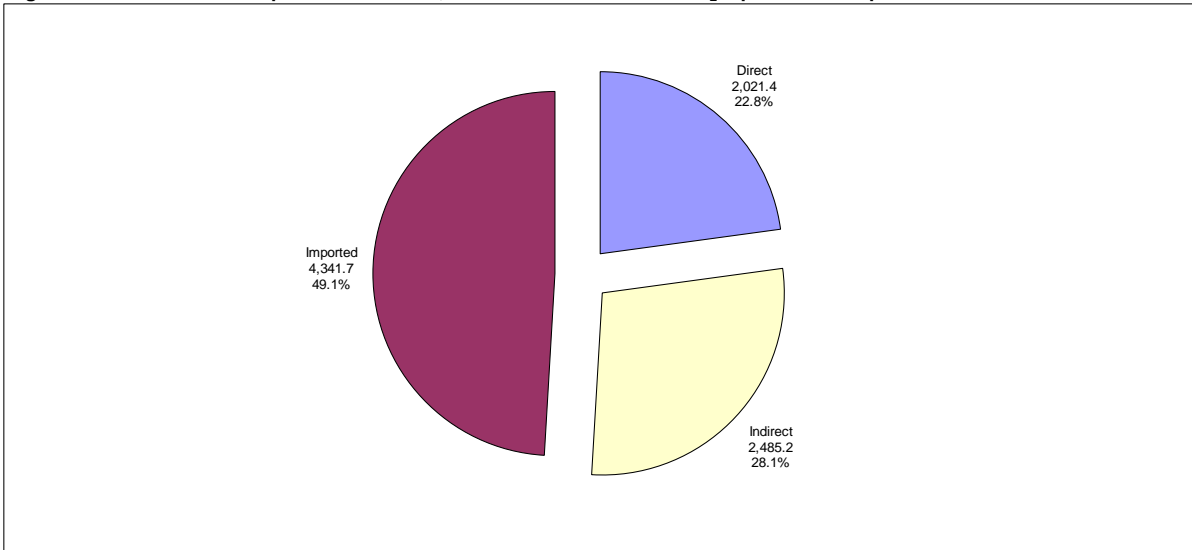
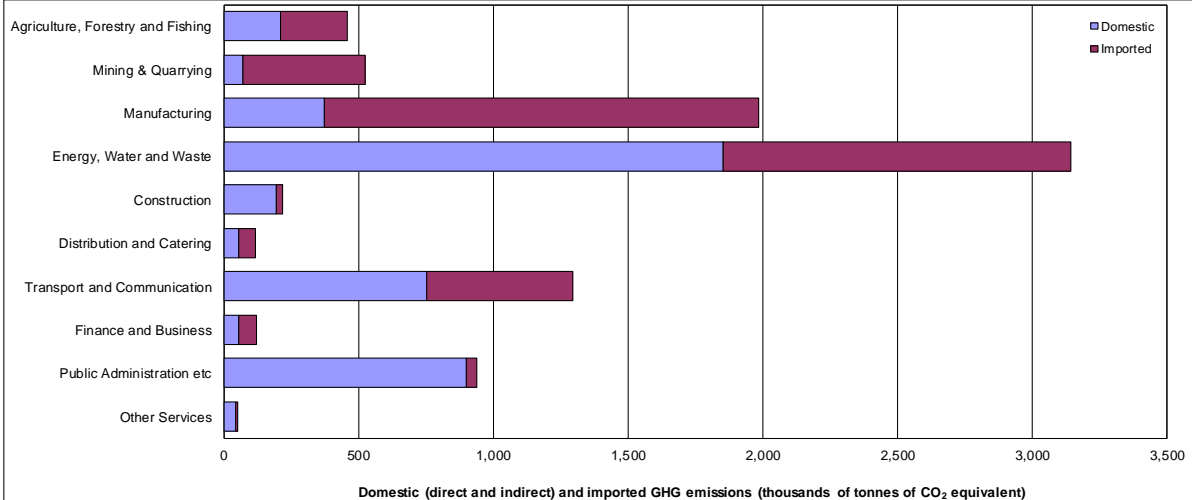


Figure 3d: Domestic and imported emissions by industrial sector



Annex A – Methodology

1. The figures presented in this report are estimated using the Scottish Government Environmental Input-Output Model (EIO) 2010.
2. The EIO is constructed using the Scottish Government Input-Output Tables 2010 (taken from the 1998-2011 Tables published in August 2014), UK Blue Book 2013 consistent Input-Output Tables 2010 and UK Analytical Tables 2010, UK Environmental Accounts 2010 (July 2016) and HM Treasury GDP Deflators, November 2016.
3. A fuller description of the model and its associated Greenhouse Gas effects estimates that this assessment is based upon can be found at:
<http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Input-Output/CarbonAssessment>.

Revisions to the Environmental Input-Output Model

4. The Environmental Input-Output Model used to estimate this year's Carbon Assessment uses the same underlying Environmental Input-Output Model as that used for the 2016/17 Carbon Assessment. The only change made has been to use the latest available Greenhouse Gas emissions ratios (ONS Environmental Accounts, July 2016) and HM Treasury deflators (November 30th 2016)
5. Updating of the GHG emissions and HMT deflators results in a slight increase in the estimated emissions when applied to last year's 2016/17 Draft Budget spending from 8.79 MtCO₂ to 8.83 MtCO₂.

Annex B - Detailed Tables

1. The tables below show the detail of the Carbon Assessment down to Level 3 spending lines, including some income lines (such as EU income). Since the Draft Budget is calculated in terms of net expenditure, the carbon assessment of the Draft Budget has been calculated on the same basis. For some portfolios, the Level 3 spending lines already have income netted out whereas others show gross expenditure. Where figures are not already expressed as net it is necessary to show a negative carbon number against the income lines. At Level 2 and at portfolio level, the income is fully netted off and there are no discrepancies between portfolios, making spending lines directly comparable.
2. Some non-cash items are not considered for the purposes of this analysis. Because these items are excluded, the Draft Budget total shown here is lower than that in the Draft Budget itself.
3. The Scottish Budget also creates private incomes (both in the public sector and in the private industries whose goods and services are demanded by Government). The Scottish Budget thus *induces* demand and further economic output, which generates carbon emissions. There are arguments for including or excluding this expenditure from the calculation and our calculation excludes emissions from induced demand.

Note: Spend lines are shown in £m and exclude non-cash items
Emissions are shown in thousands of tonnes of CO₂-equivalent
0.0 denotes less than £0.05m or 0.05 thousand tonnes

Health and Sport		Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)				
			Domestic			Imported	Total
			Direct	Indirect			
Food Standards Scotland	Choice	£2.0	0.1	0.1	0.2	0.5	
	Eating for Health	£3.0	0.1	0.2	0.4	0.7	
	Food Safety	£10.1	0.4	0.7	1.2	2.4	
	Subtotal	£15.1	0.6	1.1	1.9	3.6	
Health	Capital Income	-£20.0	-0.7	-1.8	-3.6	-6.1	
	Capital Investment	£428.1	15.2	36.7	77.1	129.0	
	Care Support and Rights	£111.9	3.1	6.8	11.6	21.5	
	Early Years	£49.6	1.4	3.0	5.1	9.5	
	General Dental Services	£414.0	11.4	25.1	42.8	79.4	
	General Medical Services	£821.4	22.7	49.8	85.0	157.4	
	General Ophthalmic Services	£102.0	2.8	6.2	10.5	19.5	
	Health Improvement and Protection	£46.1	1.3	2.8	4.8	8.8	
	Mental Health Services	£52.2	1.4	3.2	5.4	10.0	
	Miscellaneous Other Services and Resource Income	-£124.3	-3.4	-7.5	-12.9	-23.8	
	NHS Special Boards	£1,139.4	31.5	69.1	117.8	218.4	
	NHS Territorial Boards	£9,031.5	249.5	547.7	934.1	1,731.2	
	Outcomes Framework	£137.1	3.8	8.3	14.2	26.3	
	Performance & Delivery	£87.2	2.4	5.3	9.0	16.7	
	Pharmaceutical Services						
	Contractors Remuneration	£184.5	5.1	11.2	19.1	35.4	
	Quality & Governance	£23.7	0.7	1.4	2.4	4.5	
	Revenue Consequences of NPD Schemes	£29.8	0.8	1.8	3.1	5.7	
	Transformational Change Fund	£25.0	0.7	1.5	2.6	4.8	
	Workforce & Nursing	£176.4	5.3	7.4	12.2	24.8	
	Subtotal	£12,715.5	354.8	777.9	1,340.4	2,473.1	
Sport	Physical Activity	£3.3	0.2	0.3	0.4	0.9	
	Sport & Legacy	£38.1	2.7	3.2	5.0	10.9	
	Subtotal	£41.4	2.9	3.5	5.5	11.8	
Total		£12,772.0	358.3	782.5	1,347.7	2,488.5	

Finance and the Constitution		Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)			
			Domestic			Total
			Direct	Indirect	Imported	
Finance & Constitution	Capital Borrowing Repayment Local Government Boundary Commission	£30.0 £0.2	0.0 0.0	1.4 0.0	2.3 0.0	3.7 0.0
	Local Government Elections Procurement Shared Services Public Information and Engagement	£1.0 £16.8 £2.8	0.0 0.7 0.1	0.1 1.2 0.2	0.1 2.1 0.3	0.2 4.0 0.7
	Royal and Ceremonial Scotland Act 2016 non-tax implementation	£0.3 £80.0	0.0 3.3	0.0 5.9	0.0 9.8	0.1 19.1
	Scotland Acts - Tax Provision implementation & management	£12.0	0.5	0.9	1.5	2.9
	Scottish Futures Trust	£4.7	0.1	0.2	0.4	0.7
	Scottish Parliamentary Elections	£0.6	0.0	0.0	0.1	0.1
	Subtotal	£148.4	4.8	9.9	16.8	31.5
NHS Pensions	NHS Superannuation Scheme (Scotland)	£2,176.8	1.8	144.7	205.2	351.7
	Subtotal	£2,176.8	1.8	144.7	205.2	351.7
Revenue Scotland,	Revenue Scotland	£6.1	0.3	0.4	0.8	1.5
	Subtotal	£6.1	0.3	0.4	0.8	1.5
Scottish Fiscal Commission	Scottish Fiscal Commission	£1.7	0.1	0.1	0.2	0.4
	Subtotal	£1.7	0.1	0.1	0.2	0.4
Scottish Public Pensions Agency	Agency Administration IT Provision	£14.4 £2.0	0.6 0.1	1.1 0.2	1.8 0.4	3.4 0.6
	Subtotal	£16.4	0.7	1.2	2.1	4.0
Teachers' Pensions	Scottish Teachers Superannuation Scheme	£1,229.6	1.0	81.7	115.9	198.6
	Subtotal	£1,229.6	1.0	81.7	115.9	198.6
Total		£3,579.1	8.7	238.1	340.9	587.7

Education and Skills		Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)				Total
			Domestic			Imported	
			Direct	Indirect			
Advanced Learning & Science	Higher Education Office of the Chief Scientific Adviser	£1.5	0.1	0.1	0.2	0.3	
	Qualification & Accreditation	£3.0	0.1	0.2	0.4	0.7	
		£1.7	0.1	0.1	0.2	0.4	
	Subtotal	£6.2	0.3	0.4	0.7	1.4	
Children & Families	Care & Justice	£35.4	1.3	2.6	4.5	8.4	
	Care & Protection	£12.6	0.3	0.8	1.6	2.7	
	Creating Positive Futures	£92.8	2.8	4.9	9.6	17.3	
	Disclosure Scotland	£5.0	0.2	0.5	1.0	1.7	
	Office of the Chief Social Work Adviser	£19.2	0.8	1.4	2.4	4.6	
	Subtotal	£164.9	5.4	10.2	19.1	34.6	
Higher Education Student Support	Capitalised Interest	£60.0	0.0	-2.8	-4.6	-7.5	
	Net Student Loans Advanced	£560.0	5.5	14.5	96.0	116.0	
	Student Awards Agency for Scotland Operating Costs Capital	£2.0	0.1	0.2	0.4	0.6	
	Student Awards Agency for Scotland Operating Costs Resource	£10.5	0.4	0.8	1.3	2.5	
	Student Loan Company Administration Costs	£4.2	0.0	0.2	0.3	0.5	
	Student Loan Interest Subsidy to Bank	£2.0	0.0	0.1	0.2	0.2	
	Student Loan Sale Subsidy Impairment Adjustments	£0.5	0.0	0.0	0.0	0.1	
	Student Loans Fair Value Adjustment	£27.5	0.0	1.3	2.1	3.4	
	Student Support and Tuition Fee Payments	£301.6	12.6	22.2	37.1	71.9	
	Subtotal	£848.3	18.6	36.4	132.8	187.8	
	Learning	Education Analytical Services	£2.7	0.1	0.2	0.3	0.6
		Education Scotland	£21.0	0.9	1.5	2.6	5.0
		Gaelic	£23.2	0.8	2.3	2.1	5.1
		Learning & Support	£25.2	1.0	1.9	3.2	6.1
		People & Infrastructure	£76.8	2.3	4.0	7.8	14.1
		Strategy & Performance	£65.7	2.0	2.7	4.5	9.3
Subtotal	£214.6	7.1	12.6	20.5	40.2		
Scottish Funding Council	College Capital Expenditure	£70.4	2.2	5.3	12.4	19.9	
	College Capital Receipts	£23.0	-0.7	-1.7	-4.0	-6.5	
	College NPD Expenditure	£29.1	0.9	1.2	2.0	4.1	
	College Operational Expenditure	£741.3	22.2	30.9	51.1	104.2	
	College Operational Income	£190.0	-5.7	-7.9	-13.1	-26.7	
	Higher Education Capital	£45.5	1.4	3.4	8.0	12.8	
	Higher Education Financial Transactions	£10.0	0.4	0.9	1.8	3.0	
	Higher Education Resource	£1,013.9	30.3	42.3	69.9	142.5	
	SFC Admin	£7.2	0.3	0.5	0.9	1.7	
	Subtotal	£1,704.4	51.2	74.9	128.9	255.1	
Skills & Training	Employment and Training Interventions	£44.1	1.7	2.8	4.6	9.1	
	Skills Development Scotland (SDS)	£179.6	5.4	7.5	12.4	25.2	
	Subtotal	£223.7	7.0	10.3	17.0	34.3	
Total	£3,162.1	89.6	144.9	319.0	553.4		

Justice	Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)				Total
		Domestic			Imported	
		Direct	Indirect			
Community Justice Services	Community Justice Services					
	Miscellaneous	£3.2	0.1	0.2	0.4	0.8
	Offender Services	£30.4	1.3	2.2	3.7	7.2
	Subtotal	£33.6	1.4	2.5	4.1	8.0
Criminal Injuries	CIC Scheme	£14.8	0.6	1.1	1.8	3.5
	Criminal Injuries	£2.7	0.1	0.2	0.3	0.6
	Subtotal	£17.5	0.7	1.3	2.2	4.2
Judicial Salaries and Election Expenses	Judicial Salaries	£30.6	0.2	0.8	1.6	2.6
	Subtotal	£30.6	0.2	0.8	1.6	2.6
Judiciary	Judiciary	£1.0	0.0	0.1	0.1	0.2
	Subtotal	£1.0	0.0	0.1	0.1	0.2
Legal Aid	Legal Aid Administration	£10.8	0.1	0.3	0.6	0.9
	Legal Aid Fund	£126.1	1.0	3.3	6.5	10.8
	Subtotal	£136.9	1.1	3.6	7.1	11.7
Miscellaneous	Other Miscellaneous	£12.8	0.5	1.0	1.6	3.1
	Safe and Secure Scotland	£8.8	0.4	0.6	1.1	2.1
	Victim/Witness Support	£15.8	0.7	1.2	1.9	3.8
	Subtotal	£37.4	1.5	2.8	4.6	9.0
Police & Fire Pensions	Fire Pensions	£72.2	3.0	5.3	8.9	17.2
	Police Pensions	£278.4	11.6	20.5	34.3	66.3
	Subtotal	£350.6	14.6	25.8	43.2	83.5
Police Central Government	National Funding and Police Change	£92.8	3.8	6.9	11.8	22.6
	Police Support Services	-£2.1	-0.1	-0.2	-0.3	-0.5
	Subtotal	£90.7	3.7	6.8	11.6	22.1
Safer & Stronger Communities	Safer Communities	£4.1	0.2	0.3	0.5	1.0
	Subtotal	£4.1	0.2	0.3	0.5	1.0
Scottish Courts & Tribunals Service	Scottish Courts & Tribunal Service Capital	£14.5	0.5	1.3	2.6	4.4
	Scottish Courts & Tribunal Service Operating Expenditure	£73.6	3.1	5.4	9.1	17.5
	Subtotal	£88.1	3.6	6.7	11.7	21.9
Scottish Fire and Rescue Service	Scottish Fire and Rescue Service	£291.7	11.9	21.9	37.7	71.6
	Subtotal	£291.7	11.9	21.9	37.7	71.6
Scottish Police Authority	Scottish Police Authority	£1,042.4	43.3	76.9	129.4	249.6
	Subtotal	£1,042.4	43.3	76.9	129.4	249.6
Scottish Prison Service	Scottish Prison Service Capital Spending	£15.8	0.6	1.4	2.8	4.8
	Scottish Prison Service Operating Expenditure	£297.0	12.4	21.8	36.6	70.8
	Subtotal	£312.8	12.9	23.2	39.4	75.5
Total		£2,437.3	95.3	172.5	293.1	560.9

Economy, Jobs and Fair Work		Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)			
			Domestic			Total
			Direct	Indirect	Imported	
Accountant in Bankruptcy	AiB Capital Expenditure	£0.7	0.0	0.1	0.1	0.2
	AiB Less Retained Income	-£12.5	-0.5	-0.9	-1.5	-3.0
	AiB Operational Costs	£11.5	0.5	0.8	1.4	2.7
	Subtotal	-£0.3	0.0	0.0	0.0	0.0
Employability and Training	Employability and Training	£43.0	1.3	1.8	3.0	6.1
	Subtotal	£43.0	1.3	1.8	3.0	6.1
Enterprise and Energy	Energy	£80.2	2.5	5.8	16.1	24.4
	Enterprise	£178.2	7.4	13.2	22.9	43.5
	Innovation & Industries	£10.7	0.2	0.4	0.9	1.6
	Subtotal	£269.0	10.1	19.5	39.9	69.4
Parliamentary Business & Government Strategy	Cities Investment & Strategy	£56.9	2.0	4.9	10.2	17.1
	Citizens Advice Direct	£0.6	0.0	0.0	0.1	0.1
	Council of Economic Advisers	£0.1	0.0	0.0	0.0	0.0
	Office of the Chief Economic Adviser	£0.5	0.0	0.0	0.1	0.1
	Office of the Chief Statistician	£2.0	0.1	0.1	0.2	0.5
	Strategic Research and Analysis Fund	£0.8	0.0	0.1	0.1	0.2
	Subtotal	£60.8	2.1	5.2	10.7	18.0
	Total	£372.5	13.5	26.5	53.6	93.5

Communities, Social Security and Equalities		Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)			
			Domestic			Total
			Direct	Indirect	Imported	
CSSE Central Gov Grants to Local Authorities	Transfer of Management of Vacant and Derelict Land	£96.1	3.4	8.4	17.2	29.0
		£9.8	0.3	0.9	1.8	3.0
	Subtotal	£105.9	3.7	9.2	19.0	31.9
E&S Central Gov Grants to Local Authorities	Education Attainment Fund	£120.0	3.6	5.0	8.3	16.9
	Local Government Gaelic	£4.5	0.2	0.3	0.6	1.1
	Subtotal	£124.5	3.8	5.3	8.8	17.9
Equalities	Equalities	£20.3	0.7	1.0	0.6	2.3
	Subtotal	£20.3	0.7	1.0	0.6	2.3
Governance Elections and Reform	Local Governance	£0.5	0.0	0.0	0.1	0.1
	Public Services Reform and Community Empowerment	£0.7	0.0	0.1	0.1	0.2
	Subtotal	£1.2	0.1	0.1	0.2	0.3
Housing	Communities Analysis	£3.3	0.0	0.2	0.4	0.6
	Fuel Poverty/Energy Efficiency	£114.1	4.2	10.3	20.4	34.9
	Housing Support	£38.0	1.5	3.0	5.3	9.8
	More Homes	£583.6	20.5	50.7	104.4	175.6
	Subtotal	£739.0	26.2	64.2	130.6	220.9
Justice Central Gov Grants to Local Authorities	Criminal Justice Social Work	£86.5	2.1	5.7	10.8	18.5
	Subtotal	£86.5	2.1	5.7	10.8	18.5
Local Government	General Capital Grant	£623.1	21.8	54.2	111.7	187.7
	General Revenue Grant	£6,557.8	564.9	438.6	734.6	1,738.1
	Non-Domestic Rates	£2,605.8	224.5	174.3	291.9	690.6
	Subtotal	£9,786.7	811.2	667.0	1,138.2	2,616.4
Office of the Scottish Charity Regulator	Office of the Scottish Charity Regulator	£3.0	0.1	0.2	0.4	0.7
	Subtotal	£3.0	0.1	0.2	0.4	0.7
Planning	Architecture & Place	£1.3	0.1	0.1	0.2	0.3
	Building Standards	£0.3	0.0	0.0	0.0	0.1
	Planning	£1.8	0.1	0.2	0.2	0.4
	Planning & Environmental Appeals	£0.7	0.0	0.0	0.1	0.2
	Subtotal	£4.1	0.2	0.3	0.5	1.0
REC Central Gov Grants to Local Authorities	Cycling Walking and Safer Routes	£7.4	0.3	0.6	1.3	2.2
	Regional Transport Partnerships	£20.1	0.7	1.7	3.6	6.1
	Subtotal	£27.5	1.0	2.4	4.9	8.3
Scottish Housing Regulator	Scottish Housing Regulator	£4.0	0.2	0.3	0.5	1.0
	Subtotal	£4.0	0.2	0.3	0.5	1.0
Social Justice and Regeneration	Fairer Scotland	£6.9	0.2	0.3	0.2	0.8
	Regeneration	£52.3	2.1	5.2	9.3	16.6
	Subtotal	£59.2	2.4	5.5	9.5	17.4
Social Security	Discretionary Housing Payments - bedroom tax mitigation	£47.0	1.6	2.3	1.4	5.3
	Discretionary Housing Payments - other	£10.9	0.5	0.8	1.3	2.6
	Scottish Welfare Fund	£38.0	1.3	1.9	1.2	4.3
	Subtotal	£95.9	3.3	5.0	4.0	12.3
Third Sector	Third Sector	£24.5	0.7	1.3	2.0	4.0
	Subtotal	£24.5	0.7	1.3	2.0	4.0
Total		£11,082.1	855.5	767.5	1,330.0	2,953.0

Environment, Climate Change and Land Reform		Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)			
			Domestic			Total
			Direct	Indirect	Imported	
Climate Change & Land Managers Renewables Fund	Climate Change - Policy Development & Implementation	£1.1	0.0	0.1	0.1	0.3
	Land Managers' Renewables Fund	£2.0	4.4	2.8	0.8	7.9
	Sustainable Action Fund	£16.7	0.7	1.2	2.1	4.0
	Subtotal	£19.9	5.1	4.2	2.9	12.2
Environmental Services	Drinking Water Quality	£0.3	0.0	0.0	0.0	0.1
	Land Reform	£5.5	0.2	0.3	0.2	0.6
	National Park Authorities	£11.7	0.8	1.0	1.6	3.4
	Natural Assets & Flooding	£11.1	0.3	0.7	1.2	2.3
	Natural Resources	£4.0	0.2	0.3	0.5	0.9
	Private Water	£2.1	0.7	0.2	0.5	1.4
	Scottish Environment	£32.8	1.4	2.4	4.1	7.9
	Scottish Natural Heritage	£44.6	1.8	3.3	5.6	10.7
	Zero Waste	£20.5	25.9	4.2	6.5	36.6
	Subtotal	£132.5	31.3	12.4	20.3	63.9
Marine	Marine Scotland	£46.8	1.9	3.4	5.8	11.2
	Subtotal	£46.8	1.9	3.4	5.8	11.2
Research Analysis & Other Services	Contract Research Fund	£3.5	0.0	0.1	0.7	0.9
	Economic and Other Surveys	£1.4	0.0	0.1	0.2	0.4
	Programmes of Research	£47.7	1.4	4.6	5.7	11.7
	Royal Botanic Garden Edinburgh	£9.5	0.3	0.9	1.1	2.3
	Subtotal	£62.1	1.8	5.8	7.7	15.3
Scottish Water	Exemption Scheme	£1.0	0.3	0.1	0.2	0.6
	Hydro Nation	£4.0	0.2	0.3	0.5	1.0
	Interest on Voted Loans	-£100.5	-33.5	-8.6	-21.9	-64.0
	Voted Loans	£120.0	3.8	7.1	29.5	40.4
	Subtotal	£24.5	-29.2	-1.2	8.3	-22.0
Total		£285.7	11.0	24.6	45.0	80.6

Rural Economy and Connectivity (Part1)		Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)			
			Domestic			Total
			Direct	Indirect	Imported	
Air Services	Highlands and Islands					
	Airports Limited	£25.6	1.3	2.2	4.1	7.6
	Prestwick Airport	£9.4	0.3	0.8	1.8	2.9
	Support for Air Services	£14.8	34.0	1.9	4.0	39.8
	Subtotal	£49.8	35.6	4.9	9.8	50.3
Concessionary Fares & Bus Services	Concessionary Fares	£198.3	87.4	19.3	28.9	135.5
	Smartcard Programme	£1.9	0.4	0.2	0.3	0.9
	Support for Bus Services	£54.2	24.0	5.3	7.9	37.1
	Subtotal	£254.4	111.7	24.7	37.0	173.5
Digital Connectivity	Digital Strategy	£23.9	0.2	1.3	3.3	4.9
	Digital Strategy Capital	£112.1	1.1	2.4	27.4	30.9
	Subtotal	£136.0	1.3	3.7	30.7	35.7
EU Support & Related Services	Agri Environmental Measures	£55.1	85.8	15.5	25.2	126.5
	Broadband	£6.4	0.1	0.3	1.2	1.5
	Business Development	£30.2	30.2	5.9	14.9	51.0
	CAP Compliance					
	Improvements	£42.2	1.6	3.5	6.9	12.0
	Crofting Assistance	£0.3	-0.2	0.0	0.2	-0.1
	Forestry	£1.4	0.0	0.4	0.4	0.9
	Leader	£10.1	20.4	3.5	4.3	28.3
	Less EU Income	-£535.2	-1,052.3	-183.2	-230.2	-1,465.7
	Less Favoured Area Support					
	Scheme	£65.5	132.4	23.0	28.1	183.4
	Payments and Inspections					
	Admin	£44.8	1.9	3.3	5.6	10.7
	Pillar 1 Basic Payments	£262.0	529.5	91.8	112.4	733.7
	Pillar 1 Greening Payments	£131.5	265.8	46.1	56.4	368.2
	Pillar 1 Other Payments	£44.5	89.9	15.6	19.1	124.6
	Technical Assistance	£0.7	1.4	0.2	0.3	2.0
	Subtotal	£159.4	106.4	25.8	44.7	176.9
Ferry Services	Support for Ferry Services	£165.8	177.4	26.6	53.3	257.3
	Vessels and Piers	£15.2	0.5	1.3	2.9	4.6
	Subtotal	£181.0	177.9	27.9	56.1	261.9
Fisheries and Aquaculture Grants	Fisheries Grants	£14.2	0.7	1.9	4.5	7.2
	Fisheries Harbour Grants	£0.4	0.0	0.0	0.1	0.1
	Less Retained Income/Capital receipts	-£8.2	-0.4	-1.1	-2.6	-4.1
	Subtotal	£6.4	0.3	0.9	2.0	3.2
Forestry Commission	Forestry EC Receipts	-£19.8	-0.6	-5.7	-6.1	-12.3
	Policy Regulation & Administration	£4.3	0.1	1.2	1.3	2.6
	Programme Costs	£16.0	0.5	4.6	4.9	10.0
	Subsidy to Forest Enterprise	£20.7	1.1	5.6	6.6	13.3
	Woodland Grants	£40.0	1.2	11.4	12.3	24.9
	Subtotal	£61.2	2.3	17.2	19.0	38.5
Highlands And Islands Enterprise	Highlands and Islands Enterprise	£56.0	2.2	4.5	8.4	15.0
	Subtotal	£56.0	2.2	4.5	8.4	15.0
Motorways and Trunk Roads	Capital Land & Works	£425.7	11.8	28.6	88.3	128.6
	Forth Replacement Crossing	£77.0	2.7	6.7	13.8	23.2
	Forth and Tay Road Bridge					
	Maintenance	£30.6	1.2	2.9	5.5	9.6
	M&T Other Current Expenditure	£10.0	0.5	1.2	1.8	3.5
	Network Strengthening	£56.0	1.3	3.2	12.4	16.9
	Private Finance Initiative (PFI)					
	Payments	£82.0	4.3	10.1	14.5	28.9
	Roads Improvement	£16.3	0.4	0.9	3.6	4.9
	Routine and Winter					
	Maintenance	£85.1	4.4	10.5	15.0	30.0
	Structural Repairs	£27.9	0.7	1.6	6.2	8.4
	Subtotal	£810.5	27.2	65.7	161.1	254.0

Rural Economy and Connectivity (Part 2)		Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)			
			Domestic			Total
			Direct	Indirect	Imported	
Other Transport Policy, Projects & Agency Administration	Agency Administration Costs	£16.8	0.7	1.2	2.1	4.0
	Edinburgh Tram Inquiry	£1.5	0.1	0.1	0.2	0.4
	Future Transport Fund	£25.3	0.5	1.3	7.0	8.8
	Road Safety	£3.0	0.2	0.3	0.4	0.9
	Scottish Canals	£11.1	0.6	1.0	1.8	3.3
	Strategic Transport Projects Review	£3.6	0.2	0.3	0.5	1.1
	Support for Freight Industry	£1.3	0.4	0.2	0.2	0.8
	Support for Sustainable & Active Travel	£33.9	1.5	2.9	5.8	10.2
	Transport Information	£1.2	0.1	0.1	0.2	0.4
	Travel Strategy & Innovation	£40.1	1.5	3.3	7.3	12.2
	Subtotal	£137.8	5.6	10.6	25.6	41.8
Rail Services	Major Public Transport Projects	£35.6	0.8	2.0	7.9	10.8
	Rail Development	£3.0	0.2	0.3	0.4	0.9
	Rail Franchise	£310.7	65.8	43.7	46.3	155.8
	Rail Infrastructure	£426.5	14.6	35.3	80.0	129.9
	Subtotal	£775.8	81.5	81.2	134.6	297.3
Rural Services	Agricultural and Horticultural Advice and Support	£9.5	0.3	0.4	0.7	1.5
	Animal Health	£18.2	0.8	1.3	1.2	3.3
	Crofting Commission	£2.5	0.1	0.2	0.3	0.6
	Food Industry Support	£6.0	10.6	1.9	2.7	15.1
	Rural Cohesion	£1.0	1.1	0.2	0.5	1.8
	Veterinary Surveillance	£5.2	0.2	0.4	0.3	0.9
	Subtotal	£42.4	13.1	4.3	5.8	23.2
Total		£2,670.6	565.2	271.5	534.8	1,371.5

Culture, Tourism and External Affairs		Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)			
			Domestic			Total
			Direct	Indirect	Imported	
Culture, Tourism & Major Events	Creative Scotland and Other Arts	£51.9	1.9	4.6	6.0	12.5
	Cultural Collections	£67.8	1.8	7.0	7.8	16.7
	Major Events	£30.3	0.8	3.6	2.5	6.9
	National Performing Companies	£22.9	0.9	2.1	1.7	4.7
	Tourism	£41.6	0.3	4.1	2.5	6.9
	Subtotal	£214.5	5.8	21.3	20.6	47.7
External Affairs	British Irish Council International & European Relations	£0.1	0.0	0.0	0.0	0.0
		£15.7	0.7	1.2	1.9	3.7
	Subtotal	£15.8	0.7	1.2	1.9	3.8
Historic Environment Scotland	Historic Environment Scotland Capital Expenditure	£5.6	0.1	0.3	1.2	1.7
	Historic Environment Scotland Less Income	-£44.9	-1.3	-5.3	-3.7	-10.2
	Historic Environment Scotland Operational Costs	£81.5	2.3	9.6	6.6	18.6
	Subtotal	£42.2	1.2	4.7	4.2	10.0
National Records of Scotland	Less National Records of Scotland - Retained Income	-£5.8	-0.2	-0.4	-0.7	-1.4
	National Records of Scotland - Capital Expenditure	£3.3	0.1	0.3	0.6	1.0
	National Records of Scotland - Operational Costs	£35.3	1.5	2.6	4.3	8.4
	Subtotal	£32.8	1.3	2.5	4.2	8.0
Total		£305.3	8.9	29.6	30.9	69.5

Administration		Spend £m	Estimated GHG emissions			Total
			Domestic			
			Direct	Indirect	Imported	
Administration Programme	Accommodation	£15.9	0.7	1.2	2.0	3.8
	Administration Retained					
	Income	-£16.5	-0.7	-1.2	-2.0	-3.9
	Capital Projects	£13.1	0.5	1.1	2.3	3.9
	Office of Queen's Printer for Scotland	£0.1	0.0	0.0	0.0	0.0
	Other Office Overheads	£28.5	1.2	2.0	3.4	6.6
	Scottish Government Staff					
	Costs	£133.1	5.5	9.8	16.4	31.7
	Training	£3.8	0.2	0.3	0.5	0.9
	Subtotal	£178.0	7.3	13.2	22.6	43.1
Total		£178.0	7.3	13.2	22.6	43.1

Crown Office and Procurator Fiscal Service		Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)			Total
			Domestic			
			Direct	Indirect	Imported	
Crown Office & Procurator Fiscal Service	Crown Office & Procurator Fiscal Service	£107.1	4.4	7.9	13.4	25.7
	Subtotal	£107.1	4.4	7.9	13.4	25.7
Total		£107.1	4.4	7.9	13.4	25.7

Scottish Parliament and Audit Scotland		Spend £m	Estimated GHG emissions (thousands of tonnes of CO ₂ equivalent)			Total
			Domestic			
			Direct	Indirect	Imported	
Audit Scotland	Audit Scotland	£6.1	0.1	0.2	0.3	0.6
	Subtotal	£6.1	0.1	0.2	0.3	0.6
Scottish Parliament Corporate Body	Scottish Parliament Corporate Body	£85.2	3.5	6.3	10.5	20.4
	Subtotal	£85.2	3.5	6.3	10.5	20.4
Total		£91.4	3.6	6.4	10.9	20.9



Scottish Government
Riaghaltas na h-Alba
gov.scot

© Crown copyright 2016

OGL

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.scot

Any enquiries regarding this publication should be sent to us at
The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

ISBN: 978-1-78652-636-6 (web only)

Published by The Scottish Government, December 2016

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA
PPDAS84102 (12/16)

W W W . g o v . s c o t