

# Appendices

## APPENDIX A: DEFINITION OF NFR CODES

**Table A1:** Definition of NFR Codes

NFR Code	NFR Source Description
<b>1A1a</b>	1 A 1 a Public Electricity and Heat Production
<b>1A1b</b>	1 A 1 b Petroleum refining
<b>1A1c</b>	1 A 1 c Manufacture of Solid Fuels and Other Energy Industries
<b>1A2</b>	1 A 2 Manufacturing Industries and Construction
<b>1A2a</b>	1 A 2 a Iron and Steel
<b>1A2b</b>	1 A 2 b Non-ferrous Metals
<b>1A2c</b>	1 A 2 c Chemicals
<b>1A2d</b>	1 A 2 d Pulp, Paper and Print
<b>1A2e</b>	1 A 2 e Food Processing, Beverages and Tobacco
<b>1A2fi</b>	1 A 2 f i Stationary combustion in manufacturing and construction: Other
<b>1A2fii</b>	1 A 2 f ii Mobile combustion in manufacturing industries and construction
<b>1A3ai(i)</b>	1 A 3 a ii Civil Aviation (International, Landing & Take-Off)
<b>1A3aii(i)</b>	1 A 3 a ii Civil Aviation (Domestic, Landing & Take-Off)
<b>1A3b</b>	1 A 3 b Road Transportation
<b>1A3bi</b>	1 A 3 b i Road Transport, Passenger cars
<b>1A3bii</b>	1 A 3 b ii Road Transport, Light duty vehicles
<b>1A3biii</b>	1 A 3 b iii Road Transport, Heavy duty vehicles
<b>1A3biv</b>	1 A 3 b iv Road Transport, Mopeds & Motorcycles
<b>1A3bv</b>	1 A 3 b v Road Transport, Gasoline evaporation
<b>1A3bvi</b>	1 A 3 b vi Road Transport, Automobile tyre and brake wear
<b>1A3bvii</b>	1 A 3 b vii Road Transport, Automobile road abrasion
<b>1A3c</b>	1 A 3 c Railways
<b>1A3dii</b>	1 A 3 d ii National Navigation
<b>1A3e</b>	1 A 3 e Other (to be specified)
<b>1A3ei</b>	1 A 3 e i Pipeline compressors
<b>1A3eii</b>	1 A 3 e ii Other mobile sources and machinery
<b>1A4a</b>	1 A 4 a Commercial / Institutional Combustion
<b>1A4ai</b>	1 A 4 a Commercial / Institutional: Stationary
<b>1A4b</b>	1 A 4 b Residential
<b>1A4bi</b>	1 A 4 b i Residential plants
<b>1A4bii</b>	1 A 4 b ii Household and gardening (mobile)
<b>1A4c</b>	1 A 4 c Agriculture / Forestry / Fishing
<b>1A4ci</b>	1 A 4 c i Stationary
<b>1A4cii</b>	1 A 4 c ii Off-road Vehicles and Other Machinery
<b>1A4ciii</b>	1 A 4 c iii National Fishing
<b>1A5a</b>	1 A 5 a Other, Stationary (including Military)

<b>NFR Code</b>	<b>NFR Source Description</b>
<b>1A5b</b>	1 A 5 b Other, Mobile (Including military)
<b>1B1</b>	1 B 1 Fugitive Emissions from Solid Fuels
<b>1B1a</b>	1 B 1 a Coal Mining and Handling
<b>1B1b</b>	1 B 1 b Solid fuel transformation
<b>1B1c</b>	1 B 1 c Other (to be specified)
<b>1B2</b>	1 B 2 Oil and natural gas
<b>1B2a</b>	1 B 2 a Oil
<b>1B2ai</b>	1 B 2 a i Exploration Production, Transport
<b>1B2av</b>	1 B 2 a iv Refining / Storage
<b>1B2av</b>	1 B 2 a v Distribution of oil products
<b>1B2avi</b>	1 B 2 a vi Other
<b>1B2b</b>	1 B 2 b Natural gas
<b>1B2c</b>	1 B 2 c Venting and flaring
<b>2A</b>	2 A MINERAL PRODUCTS (b)
<b>2A1</b>	2 A 1 Cement Production
<b>2A2</b>	2 A 2 Lime Production
<b>2A3</b>	2 A 3 Limestone and Dolomite Use
<b>2A4</b>	2 A 4 Soda Ash Production and use
<b>2A5</b>	2 A 5 Asphalt Roofing
<b>2A6</b>	2 A 6 Road Paving with Asphalt
<b>2A7</b>	2 A 7 Other including Non Fuel Mining & Construction (to be specified)
<b>2A7a</b>	2A7a Quarrying and mining of minerals other than coal
<b>2A7b</b>	2A7b Construction and demolition
<b>2A7c</b>	2A7c Storage, handling and transport of mineral products
<b>2A7d</b>	2A7d Other Mineral products
<b>2B</b>	2 B CHEMICAL INDUSTRY
<b>2B1</b>	2 B 1 Ammonia Production
<b>2B2</b>	2 B 2 Nitric Acid Production
<b>2B3</b>	2 B 3 Adipic Acid Production
<b>2B4</b>	2 B 4 Carbide Production
<b>2B5</b>	2 B 5 Other (to be specified)
<b>2B5a</b>	2 B 5a Other Chemical Industry (to be specified)
<b>2C</b>	2 C METAL PRODUCTION
<b>2C1</b>	2 C 1 Iron and steel production
<b>2C3</b>	2 C 3 Aluminium production
<b>2C5a</b>	2 C 5 a Copper production
<b>2C5b</b>	2 C 5 b Lead production
<b>2C5d</b>	2 C 5 d Zinc production
<b>2C5e</b>	2 C 5 e Other metal production
<b>2D</b>	2 D OTHER PRODUCTION (b)
<b>2D1</b>	2 D 1 Pulp and Paper
<b>2D2</b>	2 D 2 Food and Drink
<b>2D3</b>	2 D 3 Wood processing
<b>2E</b>	2E_Production_of_Halocarbons_and_Sulphur_Hexafluoride
<b>2E1</b>	2 E 1 Halocarbons production (by-product)
<b>2E2</b>	2 E 2 Halocarbons production (fugitive)

<b>NFR Code</b>	<b>NFR Source Description</b>
<b>2F</b>	2 F Halocarbons use
<b>2G</b>	2 G OTHER (to be specified)
<b>3A</b>	3 A PAINT APPLICATION
<b>3A1</b>	3 A 1 Decorative coating application
<b>3A2</b>	3 A 2 Industrial coating application
<b>3A3</b>	3 A 3 Other coating application (Please specify the sources included/excluded in the notes column to the right)
<b>3B</b>	3 B DEGREASING AND DRY CLEANING
<b>3B1</b>	3 B 1 Degreasing
<b>3B2</b>	3 B 2 Dry cleaning
<b>3C</b>	3 C CHEMICAL PRODUCTS, MANUFACTURE AND PROCESSING
<b>3D</b>	3 D OTHER incl. products containing HMs and POPs (to be specified)
<b>3D1</b>	3 D 1 Printing
<b>3D2</b>	3 D 2 Domestic solvent use including fungicides
<b>3D3</b>	3 D 3 Other product use
<b>4A1</b>	4 A 1 Enteric_Fermentation_Cows
<b>4A10</b>	4 A 10 Enteric_Fermentation_Deer
<b>4A3</b>	4 A 3 Enteric_Fermentation_Sheep
<b>4A4</b>	4 A 4 Enteric_Fermentation_Goats
<b>4A6</b>	4 A 6 Enteric_Fermentation_Horses
<b>4A8</b>	4 A 8 Enteric_Fermentation_Swine
<b>4B</b>	4 B MANURE MANAGEMENT (c)
<b>4B1</b>	4 B 1 Cattle
<b>4B1a</b>	4 B 1 a Dairy
<b>4B1b</b>	4 B 1 b Non-Dairy
<b>4B11</b>	4 B 11 Liquid_Systems
<b>4B12</b>	4 B 12 Solid_Storage_and_Drylot
<b>4B13</b>	4 B 13 Other
<b>4B1a</b>	4 B 1 a Dairy
<b>4B1b</b>	4 B 1 b Non-Dairy
<b>4B2</b>	4 B 2 Buffalo
<b>4B3</b>	4 B 3 Sheep
<b>4B4</b>	4 B 4 Goats
<b>4B5</b>	4 B 5 Camels and Llamas
<b>4B6</b>	4 B 6 Horses
<b>4B7</b>	4 B 7 Mules and Asses
<b>4B8</b>	4 B 8 Swine
<b>4B9a</b>	4 B 9 a Laying hens
<b>4B9b</b>	4 B 9 b Broilers
<b>4B9d</b>	4 B 9 d Other poultry
<b>4C</b>	4 C RICE CULTIVATION
<b>4D</b>	4 D AGRICULTURAL SOILS
<b>4D1</b>	4 D 1 Direct Soil Emission
<b>4F</b>	4 F FIELD BURNING OF AGRICULTURAL WASTES
<b>4G</b>	4 G OTHER (d)

<b>NFR Code</b>	<b>NFR Source Description</b>
<b>5B</b>	5 B FOREST AND GRASSLAND CONVERSION
<b>5D</b>	5D_CO2_Emissions_From_Soils
<b>5E</b>	5 E Other
<b>6A</b>	6 A SOLID WASTE DISPOSAL ON LAND
<b>6B</b>	6 B WASTE-WATER HANDLING
<b>6C</b>	6 C WASTE INCINERATION (e)
<b>6Ca</b>	6 C a Clinical waste incineration (d)
<b>6Cb</b>	6 C b Industrial waste incineration (d)
<b>6Cc</b>	6 C c Municipal waste incineration (d)
<b>6Cd</b>	6 C d Cremation
<b>6Ce</b>	6 C e Small scale waste burning
<b>6D</b>	6 D OTHER WASTE: Composting and accidental fires
<b>7A</b>	7 A OTHER
<b>Memo Items</b>	
<b>1A3ai(ii)</b>	International Aviation (Cruise)
<b>1A3aii(ii)</b>	Domestic Aviation (Cruise)
<b>1A3di(i)</b>	International maritime Navigation
<b>1A3di(ii)</b>	International inland waterways (included in NEC totals only)
<b>X</b>	X (11 08 Volcanoes)

## APPENDIX B: METHODS FOR CALCULATING EMISSION DISTRIBUTIONS

For a more detailed description of the integration of point source data analysis and the development of UK emission maps, see Chapter 3 of “UK Emission Mapping Methodology 2008” (Bush *et al.*, 2010). This report outlines in detail the analysis conducted to analyse known point source emissions data, and derive the ‘area’ emission sources that make up the remaining component of UK emission totals. These area sources are then disaggregated geographically across the UK using a range of methods according to available data for the source in question. The geographical distribution of emissions across the UK is then built up from distributions of emissions in each source sector.

For large industrial point sources, emissions are compiled from a variety of official UK sources (Environment Agency, Scottish Environment Protection Agency, Northern Ireland Environment Agency, DECC Oil & Gas, Local Authorities). The area source distribution maps are generated using appropriate surrogate statistics for that sector, commonly using local activity statistics such as raw material use, energy use, industrial production and employment data, housing and population data, road vehicle and fuel sales data, periodic census or socio-economic survey data.

**Table B1:** Methods used to Map Emissions in each of the 11 UNECE Source Sectors

<b>1 Combustion in energy production and transfer</b> points offshore IDBR employment	<b>6 Solvent use</b> population points IDBR employment Land use
<b>2 Combustion in commercial, institutions, residential and agricultural sectors</b> points domestic fuel use IDBR employment IDBR agriculture IDBR commercial and public fuel use	<b>7 Road transport</b> road transport
<b>3 Combustion in industry</b> points IDBR employment IDBR industry fuel use	<b>8 Other transport and machinery</b> agriculture airports other rail shipping IDBR employment population
<b>4 Production processes</b> points IDBR employment shipping road transport population other	<b>9 Waste Treatment and disposal</b> landfill Land use Offshore points IDBR employment
<b>5 Extraction / Distribution of fossil fuels</b> points offshore other domestic fuel use population	<b>10 Agricultural, forests and landuse change</b> agriculture Land use <b>11 Other sources and sinks</b> Land use population

Table B1 provides a simple overview of the different data used to map the SNAP sectors, whilst Table B2 below provides a more detailed insight into the disaggregation methodologies used to compile the DA air quality pollutant inventories. Table B2 is presented using the NFR reporting structure, which is the format currently required for the LRTAP submission.

NFR Sector	Source	Disaggregation Method
1A1a	Power stations (all fuels)	All emissions are derived from the AEA point source database, which is based on annual emissions estimates reported to UK environmental regulators by IPC/IPPC-regulated industry and (since 2005) fuel use data available from the EUETS. Environment Agency (2009a,b), SEPA (2009a,b), NIEA (2009a,b)
1A1b	Refineries (all fuels)	Point source data provided by plant operators to IPC/IPPC pollution inventories (see 1A1a). Further detail on combustion and process emissions provided by UKPIA (2009).
1A1c	Coke & SSF production (all fuels)	Point source data provided by plant operators (see 1A1a). Regional iron & steel production and fuel use data (ISSB, 2009). UK fuel use data from DECC (2009a).
	Nuclear fuel production (all fuels)	All emissions are in England
	Colliery combustion (all fuels)	Deep mined coal production, data from the Coal Authority (2009).
	Gas production & gas separation plant (all fuels)	Arrivals of natural gas, DECC (2009a,d), DECC Oil & Gas EEMS inventory (2009)
	Offshore oil & gas (Natural gas use)	DECC Oil & Gas EEMS inventory (2009). Point source data for NO <sub>x</sub> , SO <sub>2</sub> , VOC. (CO and PM <sub>10</sub> assumed same as SO <sub>2</sub> .)
1A2a	Blast furnaces & sinter plant	Point source data provided by plant operators (see 1A1a), supplemented by site-specific breakdown of emissions from Corus (2009).
	Iron & steel combustion plant (all fuels)	Regional iron & steel production and fuel use data (ISSB, 2010).
1A2b	Primary lead & zinc production, secondary copper, aluminium & lead production, copper alloy & semis production, zinc oxide and zinc alloys production, lead battery manufacture.	Point source data provided by plant operators (see 1A1a).

NFR Sector	Source	Disaggregation Method
1A2f	Refractory & ceramic production	Regional GDP data (ONS, 2009).
	Autogenerators (coal)	All emissions in England.
	Lime, cement, brick and ammonia production (all fuels)	Point source data from plant operators (see 1A1a). All lime production and ammonia production in England.
	Other industrial combustion (oils)	Regional energy statistics, DECC (2009b), and analysis of AEA point source data derived from EUETS and IPPC data. Environment Agency (2009a,b), SEPA (2009a,b), NIEA (2009a,b)
	Other industrial combustion (SSF, coke)	
	Other industrial combustion (coal)	
	Other industrial combustion & auto-generators (gas)	Natural gas consumption data from gas network operators: Transco (2009), Northern Gas Networks (2009), Scotia Gas (2009), Wales & West (2009), Phoenix Gas (2007, 2009), Firmus Energy (2009). Regional energy statistics, DECC (2009b), and analysis of AEA point source data derived from EUETS and IPPC data. Environment Agency (2009a,b), SEPA (2009a,b), NIEA (2009a,b).
	Industrial off-road machinery (all fuels)	Regional energy statistics, DECC (2009b), supplemented by DA GDP data, ONS (2009).
1A3ai (i)	Aircraft – international take-off and landing (all fuels)	CAA (2009), database of flight information. All take-off and landing cycle emissions for each flight assigned to DA of origin airport.
1A3aii (i)	Aircraft – domestic take-off and landing (all fuels)	CAA (2009), database of flight information. All take-off and landing cycle emissions for each flight assigned to DA of origin airport.
1A3bi to 1a3bvi	Road Transport	Road fuel sales, DTI; vehicle km, DETR / DLTR, Emission factors: COPERT III/IV, (European Environment Agency, 2000/2007), Barlow et al. (2001), Composition of fleet: Vehicle Licensing Statistics Report, DfT (GB), Dept of Regional Development (NI). Traffic data: National Traffic Census, DfT (GB: 1990-2009)  Dept of Regional Development (NI: 1990-1999), Traffic Census Report (NI: 2000), Vehicle Kilometres of Travel Survey of Northern Ireland Annual Report (NI: 2001), Traffic and Travel Information 2008 (DRDNI: 2009), Fuel consumption: Digest of UK Energy

NFR Sector	Source	Disaggregation Method
		Statistics, DECC (2009a), Welsh Office fuels data (WO, 1998)
1A3c	Railways: intercity, regional and freight	Gas oil consumption estimates, Railtrack, ATOC, Translink (2009)
1A3dii	Coastal shipping (gas oil, fuel oil)	Port movement data, DfT (2009b) Maritime Statistics.
1A3eii	Aircraft support vehicles (gas oil)	Regional aircraft movements, DfT (2009d)
1A4a	Railways – stationary combustion	Regional energy statistics, DECC (2009b)
	Industrial & commercial combustion	Regional energy statistics, DECC (2009b), and analysis of AEA point source data and public and commercial mapping grids from regional employment data by sector. Gas use data supplemented by data from gas network operators (same references as 1A2f).
1A4bi	Domestic combustion	For coal, anthracite, petroleum fuels, analysis is from Regional energy statistics, DECC (2009b) and Housing Condition Survey data. Domestic peat combustion data from CEH (2009). Gas use data provided by gas network operators (same references as 1A2f). Domestic mapping grid for GB was updated in 2010, and this has been used.
1A4bii	House & garden machinery (all fuels)	Regional dwellings data, ONS (2009).
1A4ci	Agriculture – Stationary combustion	Agricultural employment data, Defra (2009) used for allocation of solid and gaseous fuels. Regional energy statistics, DECC (2009b) used for petroleum-based fuels.
1A4cii	Agriculture – mobile machinery	Agricultural off-road mapping grid, with overall petroleum fuel allocations constrained to the DECC sub-national energy data (DECC, 2009b)
1A4ciii	Fishing vessels	<i>Estimates from fishing are included within the 1A3dii Coastal Shipping sector. Separate data for the fishing fleet are not available.</i>
1A5b	Military aircraft and naval shipping	Regional GDP data (ONS, 2009).
1B1a	Deep-mined coal	Regional deep mine production, Coal Authority (2009).
1B1b	Coke & SSF production	Point source data provided by plant operators (see 1A1a).

<b>NFR Sector</b>	<b>Source</b>	<b>Disaggregation Method</b>
	Iron & steel flaring	Regional iron & steel production and fuel use data (ISSB, 2010).
1B2ai	Offshore oil & gas: offshore oil loading, well testing.	All emissions unallocated.
	Offshore oil & gas: process emissions, onshore oil loading, oil terminal storage	Emissions derived from the DECC Oil & Gas (2009) EEMS point source dataset, with extrapolations back to cover 1990, 1995 where data gaps are evident.
1B2av	Refinery process emissions (drainage, tankage, general)	Point source data provided by plant operators (see 1A1a), UKPIA (2009) and analysed using the AEA point source database.
1B2av	Petrol terminal storage and loading, Refinery road and rail haulage emissions	Point source data provided by plant operators (see 1A1a).
	Petrol station emissions from delivery, vehicle refuelling, storage tanks and spillages	Regional road transport distribution based on analysis of vehicle km data for different vehicle types and the resultant fuel use distributions. Hence, references as 1A3b.
1B2b	Onshore gas production (gasification process emissions)	Point source data provided by plant operators (see 1A1a).
	Gas leakage from supply infrastructure	Leakage data provided by gas network operators: National Grid Transco (2009), Northern Gas Networks (2009), Scotia Gas Networks (2009), Wales & West Utilities (2009), Phoenix Gas (2009).
1B2c	Offshore oil & gas: flaring & venting	Emissions derived from the DECC Oil & Gas (2009) EEMS point source dataset, with extrapolations back to cover 1990, 1995 where data gaps are evident.
	Refinery flaring	Point source data provided by plant operators (see 1A1a).
2A1	Cement decarbonising	Point source data provided by plant operators (see 1A1a).
	Concrete batching	Regional GDP data (ONS, 2009).
	Slag cement production	Slag cement production mapping grid

<b>NFR Sector</b>	<b>Source</b>	<b>Disaggregation Method</b>
2A2	Lime production decarbonising	Point source data provided by plant operators (see 1A1a).
2A3	Limestone & dolomite use in: inter plant, glass production, basic oxygen furnaces. FGD emissions from power stations.	Point source data provided by plant operators (see 1A1a).
2A4	Soda ash use in glass and chemical industries	Point source data provided by plant operators (see 1A1a).
2A7	Construction, asphalt manufacture	Regional GDP data (ONS, 2009).
	Quarrying (aggregates)	Quarries mapping grid.
	Glass industry process emissions	Point source data provided by plant operators (see 1A1a).
2B1	Ammonia production	All ammonia production now in England. Point source emissions data and plant capacity data used for earlier years.
2B2	Nitric acid production	Point source data provided by plant operators (see 1A1a). Now all England.
2B3	Adipic acid production	Point source data provided by plant operators (see 1A1a). All England.
2B5	Ship purging	All emissions unallocated.
	Chemical industry process emissions	Point source data provided by plant operators (see 1A1a).
2C	Industrial process emissions from SMEs, hot & cold steel rolling emissions	Regional GDP data (ONS, 2009).
	Process emissions from: blast furnaces, EAFs, BOFs, primary aluminium production & anode baking, alumina production, non-ferrous metal processes	Point source data provided by plant operators (see 1A1a), plus supplementary data provided by Corus (2009) and the ISSB (2010)

<b>NFR Sector</b>	<b>Source</b>	<b>Disaggregation Method</b>
	Flaring & stockpile emissions at iron & steelworks	Regional iron & steel production and fuel use data (ISSB, 2010).
	Foundries	Foundries mapping grid
2D1	Paper production process emissions	Regional GDP data (ONS, 2009).
	Wood product process emissions	Wood coating mapping grid.
2D2	Cider & wine manufacture	All emissions are in England.
	Spirit manufacture	Spirits mapping grid
	Brewery emissions	Brewing mapping grid
	Food & drink process industries: meat & fish, margarine, cakes & biscuits, animal feed, coffee roasting	Population used to disaggregate emissions.
	Other food & drink processes: bread baking, sugar beet, malting.	Point source data provided by plant operators (see 1A1a).
3	Solvent use	Population data, ONS (2009).
3A	Trade & retail decorative paints,	Population data, ONS (2009).
	Industrial coatings: commercial vehicles, aircraft, agricultural and construction vehicles.	Regional GDP data (ONS, 2009).
	Industrial coatings: wood, metal, plastic, marine, vehicle refinishing.	Various coatings mapping distribution grids are used, based on surveys of locations of such processes.
	Industrial coatings: coil, metal packaging, automotive, drum.	Point source data provided by plant operators (see 1A1a).

<b>NFR Sector</b>	<b>Source</b>	<b>Disaggregation Method</b>
3B	Domestic surface cleaning.	Population data, ONS (2009).
	Dry cleaning (solvent use)	Dry cleaning mapping grid
	Industrial surface cleaning	Industrial employment mapping distribution grid.
3C	Rubber & plastic products	Population data, ONS (2009).
	Leather coating and degreasing	Regional GDP data (ONS, 2009).
	Tyre manufacture and industrial coatings: textiles, film.	Point source data provided by plant operators (see 1A1a).
	Industrial coating manufacture: adhesives, inks, solvents and pigments	Various industry-specific coatings mapping distribution grids
3D	Industrial adhesives and solvent use, printing, aerosol and non-aerosol products (cosmetics & toiletries, household products, paint thinners),	Population data, ONS (2009).
	Printing – public gravure	Other printing mapping grid
	Road dressings	Road dressing mapping grid.
	Agrochemical use, wood impregnation	Various agricultural mapping distribution grids
	Seed oil extraction, paper coatings, some adhesive and printing processes.	Point source data provided by plant operators (see 1A1a).
4B1	Cattle waste: manure & excreta	Livestock data, via North Wyke Research (2009)
4B3	Sheep & goat waste: manure & excreta	Livestock data, via North Wyke Research (2009)
4B6	Horse waste: manure & excreta	Livestock data, via North Wyke Research (2009)

<b>NFR Sector</b>	<b>Source</b>	<b>Disaggregation Method</b>
4B8	Pig waste: manure & excreta	Livestock data, via North Wyke Research (2009)
4B9	Poultry wastes: manure & excreta	Livestock data, via North Wyke Research (2009)
4B13	Domestic pets: manure & excreta	Population data, ONS (2009).
4D1	Use of domestic fertiliser & composting	Population data, ONS (2009).
	Agricultural soil emissions	North Wyke Research (2009), livestock data and fertiliser application data.
4F	Field burning	Field burning estimates, via North Wyke Research (2009).
5B	Deforestation	CEH (2008) regional distribution data.
6A	Landfills, benzoles & tars	Regional landfill MSW disposal data ( <a href="http://www.wastedataflow.org">www.wastedataflow.org</a> )
6B	Sewage sludge decomposition	Population data, ONS (2009).
6C	Clinical waste incineration, small-scale waste burning	Population data, ONS (2009).
	Incineration: MSW, crematoria, sewage sludge, chemical waste	Point source data provided by plant operators (see 1A1a).
	Foot & mouth pyres	Data on livestock disposal, NAO report.
6D	Nappies, accidental fires, composting	Population data, ONS (2009).
7	Cigarettes, fireworks & bonfires	Population data, ONS (2009).

## APPENDIX C: DEVOLVED ADMINISTRATION PM<sub>10</sub> INVENTORIES, 1990-2008

**Table C.1** PM<sub>10</sub> Emissions Inventory for England 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	57.60	31.68	20.27	16.04	17.37	11.94	6.01	6.28	6.40	7.44	7.88	6.41	6.64	-88%	7%	78%
1A1b	1.86	2.13	2.08	2.04	1.57	1.38	1.33	1.22	1.40	1.32	1.07	0.90	0.78	-58%	1%	69%
1A1c	0.37	0.07	0.07	0.09	0.10	0.10	0.10	0.09	0.09	0.08	0.06	0.06	0.06	-84%	0%	20%
1A2a	0.09	0.14	0.16	0.18	0.12	0.25	0.23	0.12	0.18	0.14	0.15	0.18	0.18	106%	0%	86%
1A2fi	10.87	9.87	8.43	6.89	5.39	5.57	4.85	4.87	4.98	4.14	3.45	3.29	3.13	-71%	3%	76%
1A2fii	9.61	9.83	9.87	9.83	9.66	9.43	9.13	8.60	8.48	8.15	7.51	7.14	5.95	-38%	6%	83%
1A3ai(i)	0.07	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	4%	0%	93%
1A3aii(ii)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	-26%	0%	62%
1A3bi	7.22	8.59	8.03	7.92	6.47	6.35	6.10	5.89	5.79	5.67	5.45	5.25	5.06	-30%	5%	81%
1A3bii	4.90	7.44	7.41	7.35	6.21	6.26	5.69	5.45	5.20	4.89	4.38	4.13	3.73	-24%	4%	83%
1A3biii	13.64	12.75	10.34	9.21	7.74	6.78	6.07	5.50	5.12	4.61	4.25	3.76	3.05	-78%	3%	81%
1A3biv	0.28	0.13	0.13	0.15	0.14	0.14	0.14	0.15	0.13	0.12	0.10	0.10	0.08	-71%	0%	88%
1A3bvi	6.41	6.74	7.14	7.26	7.27	7.35	7.47	7.53	7.68	7.67	7.75	7.86	7.74	21%	8%	81%
1A3c	0.50	0.52	0.61	0.63	0.62	0.68	0.56	0.49	0.50	0.52	0.53	0.52	0.53	6%	1%	80%
1A3dii	3.11	3.13	2.87	2.49	2.33	1.95	1.67	2.94	3.44	4.14	5.71	5.44	6.01	93%	6%	69%
1A4ai	2.60	1.58	1.08	0.97	0.81	1.03	0.68	0.63	0.62	0.64	0.64	0.59	0.71	-73%	1%	84%
1A4bi	25.00	14.06	15.33	16.83	11.97	10.58	8.37	7.95	8.05	7.83	8.08	9.09	9.95	-60%	10%	52%
1A4bii	0.06	0.06	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-70%	0%	84%
1A4ci	2.17	2.17	2.13	2.17	2.10	2.11	2.09	2.09	2.08	2.08	2.08	2.06	2.09	-4%	2%	93%
1A4cii	5.10	5.10	5.10	5.00	4.84	4.67	4.46	4.16	3.76	3.41	2.91	2.48	2.16	-58%	2%	59%
1A5b	1.88	1.59	1.39	1.48	1.46	1.37	1.32	1.41	1.49	1.37	1.33	1.35	1.33	-29%	1%	85%
1B1b	0.37	0.24	0.26	0.26	0.19	0.15	0.23	0.22	0.22	0.25	0.38	0.34	0.37	0%	0%	92%
1B2c	0.00	0.00	0.00	0.00	0.02	0.02	0.11	0.17	0.19	0.39	0.22	0.26	0.21	17625%	0%	21%
2A1	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	100%	0%	83%
2A4	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	-100%	0%	0%
2A6	0.30	0.33	0.27	0.26	0.25	0.27	0.27	0.27	0.22	0.23	0.25	0.24	0.24	-22%	0%	86%
2A7a	8.64	7.64	6.92	6.78	6.60	6.71	6.58	6.46	6.63	6.33	6.27	6.27	6.29	-27%	6%	76%
2A7b	1.25	0.78	0.82	0.80	0.79	0.82	0.86	0.89	0.92	0.90	0.90	0.90	0.81	-35%	1%	86%
2A7c	0.15	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	-13%	0%	86%
2A7d	4.13	3.89	3.45	3.23	3.28	3.17	3.13	3.24	3.44	3.83	3.61	3.77	3.15	-24%	3%	90%
2B5a	2.64	2.03	1.28	1.13	0.97	1.00	0.99	0.88	0.55	0.60	0.62	0.50	0.38	-86%	0%	91%
2C1	4.00	4.05	4.12	3.58	3.24	3.16	2.88	3.17	2.95	2.56	2.43	4.23	4.64	16%	5%	77%
2C3	0.33	0.33	0.16	0.20	0.18	0.15	0.12	0.11	0.11	0.11	0.08	0.08	0.08	-76%	0%	56%
2C5a	0.15	0.10	0.11	0.09	0.05	0.03	0.04	0.02	0.04	0.02	0.03	0.04	0.02	-87%	0%	90%
2C5b	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.02	0.01	0.02	0.02	0.01	0.01	-49%	0%	95%
2C5d	0.18	0.20	0.13	0.09	0.07	0.08	0.08	0.01	0.01	0.01	0.00	0.00	0.00	-98%	0%	86%
2C5e	4.93	3.31	1.70	1.13	0.78	0.75	0.70	0.68	0.57	0.57	0.51	0.38	0.38	-92%	0%	89%
2D3	2.04	1.83	0.81	0.84	0.81	0.91	1.01	1.04	1.07	0.98	0.99	0.67	0.67	-67%	1%	84%
2G	1.82	1.82	1.71	1.60	1.69	1.79	1.74	1.69	1.64	1.59	1.59	1.60	1.59	-13%	2%	86%

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
3A2	6.33	4.73	4.89	4.61	4.12	3.79	3.76	3.89	3.94	4.07	4.10	4.10	3.83	-39%	4%	87%
3A3	0.46	0.42	0.50	0.46	0.56	0.52	0.48	0.50	0.51	0.47	0.60	0.57	0.56	22%	1%	85%
3C	0.12	0.12	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.14	16%	0%	94%
4B1a	0.31	0.29	0.26	0.26	0.25	0.24	0.23	0.22	0.22	0.21	0.21	0.20	0.19	-37%	0%	63%
4B1b	0.21	0.20	0.19	0.19	0.19	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-17%	0%	53%
4B8	1.56	1.57	1.68	1.54	1.53	1.50	1.15	1.01	1.05	0.98	1.01	0.98	0.96	-39%	1%	82%
4B9a	0.47	0.43	0.44	0.42	0.38	0.40	0.39	0.39	0.39	0.40	0.39	0.36	0.35	-25%	0%	77%
4B9b	3.29	3.32	4.38	4.64	4.72	5.10	4.76	5.17	5.34	5.04	5.03	4.88	4.90	49%	5%	77%
4B9d	1.50	1.62	1.82	1.90	1.79	1.92	1.80	1.65	1.62	1.69	1.74	1.55	1.55	3%	2%	77%
4F	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
4G	1.66	1.56	1.65	1.56	1.68	1.35	1.62	1.49	1.54	1.48	1.46	1.34	1.72	4%	2%	67%
6Ca	0.05	0.04	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-25%	0%	84%
6Cb	0.17	0.08	0.06	0.04	0.04	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.01	-97%	0%	88%
6Cc	1.36	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
6Cd	0.26	0.26	0.26	0.26	0.26	3.15	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0%	0%	84%
6Ce	3.38	3.38	3.39	3.39	3.39	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	1%	3%	84%
6D	1.50	1.54	1.29	1.48	1.38	1.47	1.46	1.53	1.26	1.18	1.16	1.07	1.07	-29%	1%	84%
7A	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.78	1.50	1.57	1.55	1.49	1.49	7%	2%	84%
Grand Total	209	166	147	139	127	122	106	106	106	104	103	101	99.0	-53%	100%	74%

**Table C.2:** PM<sub>10</sub> Emissions Inventory for Scotland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	7.36	4.14	2.75	2.34	3.14	3.12	1.88	0.86	1.58	1.52	2.37	2.10	0.84	-89%	6%	10%
1A1b	0.89	1.02	1.00	0.62	0.39	0.29	0.22	0.21	0.21	0.20	0.21	0.21	0.11	-87%	1%	10%
1A1c	0.03	0.03	0.04	0.04	0.05	0.04	0.08	0.05	0.05	0.05	0.04	0.05	0.04	48%	0%	14%
1A2a	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-96%	0%	0%
1A2fi	1.05	0.79	0.58	0.51	0.45	0.49	0.37	0.36	0.42	0.37	0.43	0.57	0.51	-51%	4%	12%
1A2fii	0.89	0.91	0.92	0.91	0.90	0.88	0.85	0.80	0.79	0.75	0.69	0.65	0.55	-39%	4%	8%
1A3ai(i)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13%	0%	5%
1A3aii(i)	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	14%	0%	27%
1A3bi	0.72	0.85	0.79	0.78	0.63	0.62	0.60	0.59	0.57	0.56	0.55	0.53	0.51	-29%	4%	8%
1A3bii	0.49	0.74	0.76	0.76	0.63	0.63	0.58	0.55	0.52	0.49	0.45	0.43	0.39	-21%	3%	9%
1A3biii	1.56	1.34	1.06	0.94	0.79	0.68	0.61	0.57	0.53	0.48	0.46	0.41	0.34	-78%	2%	9%
1A3biv	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-37%	0%	6%
1A3bvi	0.70	0.69	0.72	0.73	0.73	0.73	0.75	0.77	0.78	0.79	0.81	0.83	0.83	19%	6%	9%
1A3c	0.08	0.08	0.09	0.10	0.09	0.09	0.07	0.06	0.07	0.07	0.07	0.07	0.06	-15%	0%	10%
1A3dii	1.15	1.15	0.98	0.91	0.84	0.66	0.56	0.88	1.00	1.15	1.45	1.39	1.50	31%	11%	17%
1A4ai	0.25	0.15	0.11	0.10	0.08	0.11	0.07	0.06	0.06	0.06	0.06	0.06	0.07	-71%	1%	9%
1A4bi	6.26	3.57	3.64	3.75	2.84	2.44	2.00	1.92	1.79	1.70	2.29	2.61	3.01	-52%	22%	16%
1A4bii	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-71%	0%	8%
1A4ci	0.15	0.16	0.14	0.12	0.12	0.11	0.11	0.11	0.13	0.13	0.13	0.14	0.13	-12%	1%	6%
1A4cii	1.54	1.54	1.54	1.51	1.46	1.41	1.35	1.26	1.13	1.05	0.90	0.76	0.66	-57%	5%	18%
1A5b	0.21	0.19	0.16	0.17	0.16	0.16	0.15	0.16	0.16	0.15	0.15	0.15	0.15	-30%	1%	10%
1B1b	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
1B2c	0.01	0.01	0.01	0.09	0.04	0.08	0.15	0.04	0.09	0.06	0.04	0.05	0.11	1370%	1%	11%
2A1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%	0%	4%
2A4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
2A6	0.03	0.03	0.03	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	-27%	0%	8%
2A7a	1.37	1.21	1.09	1.07	1.04	1.06	1.04	1.02	1.05	1.00	0.99	0.99	1.00	-27%	7%	12%
2A7b	0.13	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.08	0.09	0.08	-39%	1%	8%
2A7c	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-19%	0%	8%
2A7d	0.34	0.33	0.28	0.27	0.27	0.26	0.26	0.26	0.27	0.28	0.25	0.26	0.24	-31%	2%	7%
2B5a	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-97%	0%	0%
2C1	0.28	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
2C3	0.10	0.09	0.02	0.02	0.02	0.01	0.01	0.01	0.04	0.04	0.04	0.03	0.04	-64%	0%	26%
2C5a	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-89%	0%	3%
2C5b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-51%	0%	4%
2C5d	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-96%	0%	8%
2C5e	0.39	0.26	0.13	0.09	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	-92%	0%	7%
2D3	0.14	0.13	0.06	0.06	0.06	0.07	0.07	0.08	0.07	0.07	0.05	0.05	0.05	-67%	0%	6%
2G	0.19	0.19	0.17	0.16	0.16	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.15	-18%	1%	8%
3A2	0.48	0.34	0.33	0.31	0.28	0.26	0.25	0.25	0.26	0.28	0.30	0.31	0.28	-42%	2%	6%
3A3	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	22%	0%	6%
3C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	16%	0%	3%

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
4B1a	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-18%	0%	10%
4B1b	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.06	-8%	0%	20%
4B8	0.11	0.14	0.17	0.14	0.16	0.19	0.13	0.12	0.12	0.12	0.12	0.11	0.11	-3%	1%	9%
4B9a	0.07	0.06	0.05	0.04	0.04	0.05	0.05	0.04	0.05	0.04	0.04	0.04	0.04	-42%	0%	9%
4B9b	0.47	0.49	0.48	0.40	0.53	0.60	0.57	0.57	0.64	0.56	0.53	0.55	0.54	16%	4%	9%
4B9d	0.22	0.24	0.20	0.16	0.20	0.23	0.22	0.18	0.20	0.19	0.18	0.18	0.17	-20%	1%	9%
4F	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
4G	0.26	0.28	0.30	0.30	0.34	0.26	0.32	0.31	0.31	0.29	0.29	0.27	0.32	25%	2%	12%
6Ca	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-30%	0%	8%
6Cb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	134%	0%	6%
6Cc	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
6Cd	0.04	0.04	0.04	0.04	0.04	0.79	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0%	0%	13%
6Ce	0.36	0.36	0.35	0.35	0.35	0.35	0.35	0.34	0.34	0.34	0.34	0.34	0.34	-5%	2%	8%
6D	0.16	0.16	0.13	0.15	0.14	0.15	0.15	0.16	0.13	0.12	0.12	0.11	0.11	-33%	1%	8%
7A	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.18	0.15	0.16	0.16	0.15	0.15	1%	1%	8%
Grand Total	29.0	22.2	19.5	18.4	17.5	17.5	14.5	13.3	14.1	13.6	15.0	14.9	13.7	-53%	100%	10%

**Table C.3:** PM<sub>10</sub> Emissions Inventory for Wales 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	2.72	1.47	0.96	0.70	1.41	1.14	0.60	0.72	0.69	0.79	0.89	0.74	0.85	-69%	8%	10%
1A1b	0.59	0.68	0.66	0.52	0.50	0.49	0.43	0.50	0.32	0.29	0.44	0.41	0.24	-60%	2%	21%
1A1c	0.03	0.01	0.02	0.01	0.02	0.01	0.01	0.01	0.00	0.00	0.03	0.01	0.01	-63%	0%	4%
1A2a	0.07	0.15	0.11	0.18	0.15	0.17	0.05	0.03	0.04	0.03	0.03	0.03	0.03	-56%	0%	14%
1A2fi	0.99	0.70	0.39	0.43	0.46	0.45	0.43	0.37	0.37	0.26	0.21	0.20	0.21	-79%	2%	5%
1A2fii	0.65	0.67	0.67	0.67	0.66	0.64	0.62	0.59	0.58	0.56	0.52	0.49	0.41	-37%	4%	6%
1A3ai(i)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54%	0%	1%
1A3aii(i)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36%	0%	2%
1A3bi	0.45	0.52	0.48	0.48	0.39	0.38	0.37	0.36	0.36	0.35	0.34	0.33	0.32	-28%	3%	5%
1A3bii	0.31	0.46	0.46	0.46	0.39	0.39	0.36	0.35	0.33	0.31	0.28	0.27	0.24	-21%	2%	5%
1A3biii	0.81	0.69	0.56	0.49	0.39	0.34	0.30	0.27	0.25	0.23	0.21	0.19	0.16	-81%	1%	4%
1A3biv	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	-40%	0%	4%
1A3bvi	0.38	0.39	0.41	0.42	0.41	0.41	0.43	0.43	0.44	0.44	0.45	0.46	0.46	22%	4%	5%
1A3c	0.07	0.07	0.09	0.09	0.09	0.07	0.06	0.05	0.06	0.06	0.06	0.06	0.06	-16%	1%	9%
1A3dii	0.52	0.52	0.44	0.39	0.37	0.29	0.24	0.42	0.55	0.63	0.81	0.77	0.87	67%	8%	10%
1A4ai	0.21	0.12	0.08	0.07	0.06	0.08	0.05	0.04	0.04	0.04	0.04	0.04	0.05	-76%	0%	6%
1A4bi	4.85	2.65	2.94	3.31	2.28	2.01	1.54	1.47	1.51	1.48	1.82	2.14	2.38	-51%	22%	12%
1A4bii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-71%	0%	5%
1A4ci	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-28%	0%	1%
1A4cii	1.05	1.05	1.05	1.03	1.00	0.96	0.92	0.86	0.78	0.71	0.61	0.52	0.45	-57%	4%	12%
1A5b	0.08	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-45%	0%	3%
1B1b	0.15	0.17	0.17	0.17	0.21	0.12	0.06	0.10	0.05	0.05	0.08	0.04	0.03	-80%	0%	8%
1B2c	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	918%	0%	1%
2A1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%	0%	8%
2A4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
2A6	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-33%	0%	4%
2A7a	1.01	0.89	0.81	0.79	0.77	0.79	0.77	0.76	0.78	0.74	0.73	0.73	0.74	-27%	7%	9%
2A7b	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	-45%	0%	4%
2A7c	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-26%	0%	4%
2A7d	0.16	0.15	0.11	0.10	0.10	0.10	0.09	0.10	0.10	0.09	0.09	0.09	0.05	-65%	1%	2%
2B5a	0.08	0.04	0.02	0.03	0.02	0.04	0.02	0.02	0.08	0.05	0.06	0.04	0.04	-49%	0%	9%
2C1	2.67	2.82	2.78	2.53	2.41	1.44	0.85	1.55	1.71	1.48	1.67	2.23	1.41	-47%	13%	23%
2C3	0.24	0.21	0.07	0.07	0.07	0.07	0.05	0.05	0.05	0.04	0.03	0.03	0.03	-89%	0%	19%
2C5a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-67%	0%	6%
2C5b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-87%	0%	0%
2C5d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-84%	0%	4%
2C5e	0.18	0.12	0.06	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	-92%	0%	3%
2D3	0.14	0.13	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.05	0.05	-67%	0%	6%
2G	0.09	0.09	0.08	0.07	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	-26%	1%	4%
3A2	0.38	0.26	0.27	0.24	0.22	0.20	0.19	0.20	0.20	0.21	0.22	0.22	0.20	-48%	2%	4%
3A3	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.04	22%	0%	7%
3C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21%	0%	3%

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
4B1a	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-27%	0%	12%
4B1b	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-12%	0%	11%
4B8	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-79%	0%	0%
4B9a	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.02	0.02	0.02	0.02	-39%	0%	4%
4B9b	0.23	0.22	0.33	0.39	0.39	0.38	0.22	0.41	0.35	0.28	0.24	0.29	0.28	21%	3%	4%
4B9d	0.11	0.11	0.14	0.16	0.15	0.14	0.08	0.13	0.11	0.09	0.08	0.09	0.09	-16%	1%	4%
4F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
4G	0.24	0.24	0.21	0.24	0.26	0.20	0.25	0.24	0.25	0.23	0.24	0.22	0.29	17%	3%	11%
6Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-28%	0%	5%
6Cb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-87%	0%	4%
6Cc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
6Cd	0.01	0.01	0.01	0.01	0.01	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0%	0%	2%
6Ce	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	-2%	2%	5%
6D	0.09	0.09	0.08	0.09	0.08	0.09	0.09	0.09	0.07	0.07	0.07	0.06	0.06	-31%	1%	5%
7A	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.09	0.09	0.09	0.09	0.09	4%	1%	5%
Grand Total	20.2	16.4	15.1	14.9	14.0	12.4	9.8	10.9	10.8	10.3	11.0	11.4	10.7	-47%	100%	8%

**Table C.4:** PM<sub>10</sub> Emissions Inventory for Northern Ireland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	2.74	1.47	0.96	0.57	0.76	1.03	0.40	0.42	0.32	0.30	0.30	0.26	0.23	-92%	3%	3%
1A1b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1A1c	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1A2a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1A2fi	0.55	0.48	0.38	0.31	0.32	0.24	0.15	0.13	0.18	0.27	0.26	0.26	0.28	-49%	3%	7%
1A2fii	0.34	0.35	0.35	0.35	0.34	0.33	0.31	0.30	0.30	0.29	0.27	0.23	0.23	-33%	3%	3%
1A3ai(i)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	307%	0%	1%
1A3aii(i)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1%	0%	9%
1A3bi	0.30	0.47	0.49	0.50	0.43	0.43	0.42	0.40	0.39	0.38	0.35	0.35	0.32	8%	4%	5%
1A3bii	0.41	0.43	0.36	0.35	0.30	0.29	0.26	0.25	0.23	0.21	0.19	0.16	0.14	-66%	2%	3%
1A3biii	0.59	0.57	0.46	0.43	0.37	0.33	0.37	0.37	0.31	0.28	0.27	0.24	0.21	-64%	2%	6%
1A3biv	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-59%	0%	2%
1A3bvi	0.31	0.35	0.38	0.39	0.40	0.42	0.47	0.50	0.48	0.47	0.49	0.49	0.49	62%	6%	5%
1A3c	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	5%	0%	2%
1A3dii	0.18	0.19	0.16	0.15	0.14	0.11	0.10	0.17	0.21	0.25	0.35	0.33	0.37	98%	4%	4%
1A4ai	0.20	0.10	0.07	0.06	0.04	0.06	0.04	0.03	0.03	0.03	0.04	0.03	0.01	-96%	0%	1%
1A4bi	12.34	6.87	6.32	5.86	5.47	5.03	4.64	4.21	3.83	3.58	3.59	3.79	3.92	-68%	45%	20%
1A4bii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-69%	0%	3%
1A4ci	0.02	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	-29%	0%	1%
1A4cii	0.95	0.95	0.95	0.93	0.91	0.87	0.83	0.78	0.70	0.66	0.56	0.48	0.42	-56%	5%	11%
1A5b	0.05	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.04	0.03	0.04	0.04	0.04	-28%	0%	2%
1B1b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1B2c	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
2A1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%	0%	4%
2A4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
2A6	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-16%	0%	2%
2A7a	0.29	0.25	0.23	0.22	0.22	0.22	0.22	0.21	0.22	0.21	0.21	0.21	0.21	-27%	2%	3%
2A7b	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-30%	0%	2%
2A7c	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-7%	0%	2%
2A7d	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.07	-28%	1%	2%
2B5a	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
2C1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
2C3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-49%	0%	0%
2C5a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-78%	0%	1%
2C5b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-54%	0%	0%
2C5d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-93%	0%	2%
2C5e	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-92%	0%	0%
2D3	0.11	0.10	0.04	0.05	0.04	0.05	0.05	0.06	0.06	0.05	0.05	0.04	0.04	-67%	0%	5%
2G	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	-6%	0%	2%
3A2	0.19	0.13	0.13	0.12	0.11	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.10	-46%	1%	2%
3A3	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	22%	0%	3%

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
3C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34%	0%	0%
4B1a	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	9%	1%	15%
4B1b	0.05	0.06	0.06	0.06	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.06	0.05	0%	1%	17%
4B8	0.17	0.16	0.16	0.12	0.12	0.12	0.10	0.11	0.11	0.10	0.10	0.10	0.10	-41%	1%	9%
4B9a	0.05	0.07	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-5%	1%	10%
4B9b	0.35	0.51	0.53	0.55	0.57	0.54	0.63	0.73	0.72	0.68	0.71	0.67	0.67	89%	8%	10%
4B9d	0.16	0.25	0.22	0.23	0.22	0.20	0.24	0.23	0.22	0.23	0.25	0.21	0.21	31%	2%	10%
4F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
4G	0.22	0.23	0.24	0.23	0.25	0.19	0.23	0.22	0.22	0.20	0.20	0.18	0.24	5%	3%	9%
6Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-23%	0%	3%
6Cb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	156%	0%	2%
6Cc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
6Cd	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0%	0%	2%
6Ce	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	4%	1%	3%
6D	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	-26%	0%	3%
7A	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.05	0.05	10%	1%	3%
Grand Total	21.1	14.6	13.1	12.1	11.7	11.2	10.2	9.9	9.3	8.9	9.0	8.8	8.8	-58%	100%	7%

**Table C.5:** Unallocated PM<sub>10</sub> Emissions in the UK, 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1c	0.14	0.21	0.22	0.22	0.22	0.27	0.22	0.24	0.24	0.23	0.23	0.18	0.19	30%	21%	62%
1A4cii	1.68	1.44	1.38	1.18	1.04	1.07	0.75	0.82	0.86	0.66	0.81	0.84	0.68	-59%	79%	19%
2G	0.07	0.06	0.06	0.05	0.05	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
Grand Total	1.9	1.7	1.7	1.5	1.3	1.4	1.0	1.1	1.1	0.9	1.0	1.0	0.9	-54%	100%	1%

## APPENDIX D: DEVOLVED ADMINISTRATION CO INVENTORIES, 1990-2008

**Table D.1** Carbon Monoxide Emissions Inventory for England 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	91.8	85.7	48.9	43.8	52.9	52.7	51.2	58.7	56.6	57.8	61.9	65.5	59.3	-35%	3%	75%
1A1b	4.8	5.5	5.4	4.9	3.9	2.5	2.8	3.3	3.0	6.9	3.6	2.9	2.1	-57%	0%	57%
1A1c	2.4	1.6	1.9	1.7	2.5	2.8	2.3	2.4	2.3	2.4	1.4	1.5	2.0	-15%	0%	12%
1A2a	36.9	11.9	11.8	10.9	7.3	8.9	9.7	7.9	7.9	7.6	7.9	7.3	5.4	-85%	0%	55%
1A2fi	115.3	154.9	138.2	125.6	101.5	92.8	98.2	101.1	101.4	77.1	74.8	74.4	72.4	-37%	3%	81%
1A2fii	169.6	173.5	173.6	173.6	173.6	173.6	173.6	173.5	180.3	182.8	183.8	187.5	163.7	-3%	7%	83%
1A3ai(i)	7.0	6.9	7.7	7.8	7.7	6.9	6.7	6.6	6.8	7.1	7.0	6.8	6.5	-8%	0%	95%
1A3aii(i)	20.5	23.1	26.3	38.1	44.1	48.7	41.9	38.1	44.1	46.2	41.3	27.4	24.6	20%	1%	81%
1A3bi	4511.7	3861.4	3517.4	3298.9	2892.7	2600.7	2326.4	2072.4	1848.1	1602.5	1420.4	1264.4	1147.5	-75%	52%	84%
1A3bii	613.7	494.6	380.8	306.3	236.2	187.0	146.5	120.1	99.5	81.7	72.3	63.9	56.8	-91%	3%	84%
1A3biii	63.9	62.8	58.2	55.1	53.4	49.9	48.4	47.6	47.6	46.0	44.5	40.9	34.3	-46%	2%	81%
1A3biv	106.4	72.1	80.4	88.0	83.3	83.5	83.2	88.6	77.8	76.1	67.7	66.1	55.6	-48%	3%	86%
1A3c	8.1	8.1	9.2	9.0	9.8	10.5	9.5	9.2	9.3	9.5	9.5	9.4	9.8	20%	0%	79%
1A3dii	5.8	5.2	5.2	4.6	4.5	3.7	3.1	5.6	5.4	6.3	8.6	7.7	8.4	44%	0%	69%
1A4ai	7.6	5.8	5.3	5.2	5.0	5.4	4.9	4.8	5.0	4.9	4.8	4.8	5.2	-31%	0%	85%
1A4bi	573.2	428.6	380.7	382.7	322.0	323.5	253.8	221.0	211.4	170.5	157.8	163.3	172.5	-70%	8%	57%
1A4bii	60.3	63.5	58.9	57.5	56.3	56.0	55.8	55.6	55.4	55.6	56.1	56.7	57.4	-5%	3%	84%
1A4ci	14.2	14.1	14.2	14.4	14.2	14.3	14.2	14.2	14.1	14.1	14.1	13.9	14.1	-1%	1%	93%
1A4cii	14.5	14.5	14.5	14.2	13.8	13.6	13.6	13.5	13.1	13.1	12.3	11.8	11.6	-20%	1%	59%
1A5b	12.1	9.1	7.9	7.9	7.4	7.5	7.9	8.1	8.0	7.4	7.6	7.8	7.9	-34%	0%	85%
1B1b	22.0	11.9	11.8	9.2	9.3	5.2	3.6	5.9	3.3	3.2	3.6	3.2	3.3	-85%	0%	40%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2c	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.6	0.6	0.5	0.4	0.4	6%	0%	5%
2A4	5.5	2.8	2.6	2.5	3.5	5.0	5.0	6.4	6.2	3.3	4.0	4.6	4.9	-12%	0%	91%
2A7d	5.3	3.6	3.4	1.6	2.8	2.5	2.5	2.7	2.6	4.3	4.7	3.4	4.5	-16%	0%	100%
2B5a	81.8	88.2	68.6	65.5	82.5	81.6	39.0	36.6	28.5	24.8	25.7	28.6	20.9	-74%	1%	98%
2C1	241.9	264.9	250.2	248.0	177.9	224.1	217.7	205.5	205.1	211.4	209.4	204.4	199.8	-17%	9%	69%
2C3	9.6	7.9	9.5	12.5	13.2	13.6	13.4	15.8	17.0	17.6	18.0	17.4	17.6	82%	1%	52%
2C5a	4.4	2.3	3.9	3.3	0.8	0.5	0.6	0.3	0.4	0.3	0.3	0.1	0.1	-97%	0%	90%
2C5b	0.8	0.8	0.9	0.9	0.9	1.0	0.7	1.0	0.4	0.3	0.7	0.5	0.5	-37%	0%	95%
2C5d	39.7	43.1	40.1	66.1	73.2	78.2	81.5	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2C5e	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.9	0.1	0.3	73%	0%	100%
4F	244.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Ca	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-25%	0%	84%
6Cb	1.1	1.2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.4	125%	0%	84%
6Cc	1.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Cd	2.8	2.8	2.8	2.8	18.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	0%	0%	84%
6Ce	13.2	13.2	13.2	13.2	13.2	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	1%	1%	84%
6D	5.7	6.7	6.7	6.7	6.7	6.7	6.7	6.8	6.7	6.8	6.8	6.8	6.8	1%	0%	84%
7A	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.8	6.7	6.8	6.8	6.8	6.8	-32%	0%	84%
Grand Total	7127	5959	5368	5091	4487	4203	3749	3358	3091	2771	2555	2376	2199	-69%	100%	78%

**Table D.2:** Carbon Monoxide Emissions Inventory for Scotland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	12.4	11.8	6.8	6.4	8.5	8.1	7.9	7.4	7.6	7.5	9.8	8.9	11.8	-5%	5%	15%
1A1b	1.1	1.2	1.2	1.1	0.9	0.8	0.7	0.7	1.0	1.0	0.9	1.0	1.0	-6%	0%	28%
1A1c	1.1	1.6	1.9	1.6	1.4	1.5	1.5	1.4	1.4	1.4	1.2	1.3	1.3	18%	1%	8%
1A2a	8.7	0.7	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-98%	0%	2%
1A2fi	9.8	14.1	12.5	11.2	9.0	8.6	11.2	11.0	11.7	10.0	9.2	9.6	9.8	-1%	4%	11%
1A2fii	15.8	16.1	16.1	16.2	16.1	16.2	16.2	16.1	16.8	16.9	16.8	17.2	15.0	-5%	6%	8%
1A3ai(i)	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	12%	0%	4%
1A3ai(ii)	3.6	3.5	3.0	4.1	5.1	5.2	4.1	4.6	5.6	6.2	5.7	3.7	3.5	-2%	1%	12%
1A3bi	423.8	362.5	330.7	306.0	269.9	242.5	219.4	195.9	175.1	151.3	136.1	121.2	110.3	-74%	46%	8%
1A3bii	59.2	47.6	37.6	30.2	22.9	18.0	14.4	11.8	9.7	8.0	7.3	6.4	5.7	-90%	2%	8%
1A3biii	7.4	6.6	6.0	5.6	5.4	5.0	4.9	5.0	4.9	4.8	4.8	4.5	3.8	-48%	2%	9%
1A3biv	5.1	4.4	4.7	5.3	5.1	5.1	5.6	6.1	5.5	5.1	4.6	4.5	4.0	-21%	2%	6%
1A3c	1.2	1.2	1.4	1.4	1.5	1.4	1.1	1.2	1.2	1.2	1.3	1.2	1.2	-4%	0%	10%
1A3dii	2.2	1.9	1.8	1.7	1.6	1.3	1.0	1.7	1.6	1.8	2.2	2.0	2.1	-3%	1%	17%
1A4ai	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-26%	0%	8%
1A4bi	164.9	116.4	101.5	92.1	81.8	76.3	63.7	54.8	48.8	38.8	42.4	45.4	51.8	-69%	21%	17%
1A4bii	6.4	6.7	6.1	6.0	5.8	5.7	5.7	5.6	5.6	5.6	5.7	5.7	5.8	-10%	2%	8%
1A4ci	0.9	0.9	0.8	0.7	0.8	0.7	0.7	0.7	0.9	0.8	0.9	1.0	0.8	-2%	0%	6%
1A4cii	4.4	4.4	4.4	4.3	4.2	4.1	4.1	4.1	4.0	4.0	3.8	3.6	3.6	-19%	1%	18%
1A5b	1.3	1.0	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.9	-33%	0%	9%
1B1b	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1B2c	1.0	1.1	0.9	1.1	1.0	1.7	1.1	0.8	0.8	0.9	0.7	0.9	1.0	-2%	0%	11%
2A4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-12%	0%	2%
2A7d	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2B5a	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-11%	0%	0%
2C1	44.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2C3	3.8	3.1	3.5	3.4	3.4	3.3	3.4	3.4	3.4	3.4	4.1	4.2	4.4	14%	2%	13%
2C5a	0.2	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-98%	0%	3%
2C5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-37%	0%	4%
2C5d	1.7	1.9	1.7	2.8	3.1	3.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2C5e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
4F	18.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Ca	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-30%	0%	8%
6Cb	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	134%	0%	8%
6Cc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Cd	0.4	0.4	0.4	0.4	0.4	4.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0%	0%	13%
6Ce	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	-5%	1%	8%
6D	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	-36%	0%	8%
7A	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	-5%	0%	8%
Grand Total	807	613	548	507	453	418	375	338	311	274	262	247	242	-70%	100%	9%

**Table D.3:** Carbon Monoxide Emissions Inventory for Wales 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	4.7	4.4	2.5	2.1	3.6	4.5	3.6	3.8	5.2	4.5	5.2	4.5	5.4	15%	2%	7%
1A1b	1.2	1.3	1.3	1.2	0.9	0.8	0.8	1.0	1.3	1.3	1.0	0.7	0.6	-50%	0%	16%
1A1c	0.4	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.5	19%	0%	3%
1A2a	22.0	9.7	11.3	11.7	7.1	7.0	5.1	6.7	6.0	5.6	6.3	5.3	4.2	-81%	2%	42%
1A2fi	8.4	9.2	8.8	8.4	9.4	9.3	9.4	7.4	7.8	5.6	6.0	6.2	4.9	-42%	2%	5%
1A2fii	11.6	11.8	11.8	11.8	11.8	11.8	11.8	11.8	12.3	12.5	12.7	12.9	11.3	-3%	4%	6%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39%	0%	0%
1A3aii(i)	1.4	0.9	1.2	1.9	2.2	2.5	1.5	1.1	1.6	2.6	2.4	1.9	1.7	20%	1%	6%
1A3bi	271.2	231.7	210.8	197.3	173.1	155.9	141.3	126.9	114.5	98.8	88.6	79.4	72.3	-73%	28%	5%
1A3bii	38.1	30.6	23.5	19.0	14.6	11.5	9.2	7.6	6.3	5.2	4.6	4.1	3.6	-90%	1%	5%
1A3biii	3.8	3.4	3.1	2.9	2.7	2.5	2.4	2.4	2.3	2.3	2.2	2.0	1.8	-53%	1%	4%
1A3biv	4.1	3.6	4.0	4.4	4.3	4.3	4.4	4.6	4.1	4.1	3.7	3.5	3.1	-24%	1%	5%
1A3c	1.1	1.1	1.3	1.3	1.4	1.0	0.9	0.9	1.1	1.1	1.2	1.1	1.1	-5%	0%	9%
1A3dii	1.0	0.9	0.8	0.7	0.7	0.6	0.4	0.8	0.9	1.0	1.2	1.1	1.2	25%	0%	10%
1A4ai	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-46%	0%	5%
1A4bi	102.3	76.3	66.9	69.8	56.4	58.0	43.2	36.9	35.7	27.7	28.6	31.8	34.7	-66%	13%	11%
1A4bii	3.6	3.8	3.5	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	-8%	1%	5%
1A4ci	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	17%	0%	1%
1A4cii	3.0	3.0	3.0	2.9	2.9	2.8	2.8	2.8	2.7	2.7	2.6	2.4	2.4	-19%	1%	12%
1A5b	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-50%	0%	3%
1B1b	12.3	19.0	19.0	14.7	15.1	8.5	3.5	4.9	3.3	2.9	6.4	7.3	5.1	-59%	2%	60%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46%	0%	0%
2A4	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.2	0.3	0.3	0.3	-12%	0%	6%
2A7d	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2B5a	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.2	0.3	0.4	0.4	0.3	16%	0%	1%
2C1	156.6	190.3	198.3	192.9	155.4	131.0	65.9	71.3	94.7	98.8	125.3	108.8	88.4	-44%	34%	31%
2C3	8.3	6.8	7.7	5.2	8.4	11.7	11.8	8.9	8.0	8.2	14.1	14.4	12.0	44%	5%	35%
2C5a	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-78%	0%	6%
2C5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2C5d	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2C5e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
4F	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Ca	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-28%	0%	5%
6Cb	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	140%	0%	5%
6Cc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
6Cd	0.1	0.1	0.1	0.1	0.1	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-1%	0%	2%
6Ce	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	-2%	0%	5%
6D	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	-34%	0%	5%
7A	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-2%	0%	5%
Grand Total	661	611	583	555	477	432	325	307	314	291	319	294	261	-61%	100%	9%

**Table D.4:** Carbon Monoxide Emissions Inventory for Northern Ireland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	4.1	3.8	2.2	1.4	1.3	1.5	1.1	1.1	2.1	2.8	2.9	2.7	2.6	-36%	3%	3%
1A1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1A2fi	4.0	4.9	4.3	4.1	2.5	1.9	2.0	1.9	1.9	1.7	2.4	2.7	2.4	-39%	2%	3%
1A2fii	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.5	6.8	7.1	7.2	6.3	4%	6%	3%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127%	0%	1%
1A3ai(ii)	0.7	0.9	1.0	1.0	1.2	1.1	0.9	0.8	1.0	1.1	1.1	0.7	0.6	-4%	1%	2%
1A3bi	138.1	115.2	100.0	94.9	84.5	75.1	63.4	56.3	51.0	44.1	38.3	35.7	31.9	-77%	32%	2%
1A3bii	8.7	7.6	6.1	5.3	4.5	3.9	3.2	2.9	2.5	2.2	2.0	1.7	1.5	-83%	2%	2%
1A3biii	2.6	2.7	2.5	2.5	2.5	2.5	3.0	3.2	2.9	2.8	2.9	2.7	2.5	-3%	3%	6%
1A3biv	2.1	1.4	1.9	2.0	1.9	1.9	2.0	2.6	2.3	2.3	1.9	1.9	1.5	-27%	2%	2%
1A3c	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	38%	0%	3%
1A3dii	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.5	48%	1%	4%
1A4ai	0.4	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-82%	0%	1%
1A4bi	214.2	128.0	109.8	97.8	88.8	77.9	68.8	58.6	48.6	40.7	39.1	41.3	43.0	-80%	43%	14%
1A4bii	2.0	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	-2%	2%	3%
1A4ci	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40%	0%	1%
1A4cii	2.7	2.7	2.7	2.7	2.6	2.5	2.5	2.5	2.4	2.5	2.4	2.3	2.2	-17%	2%	11%
1A5b	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-31%	0%	2%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2A4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-12%	0%	0%
2A7d	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2B5a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-11%	0%	0%
2C1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2C3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-11%	0%	0%
2C5a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-93%	0%	1%
2C5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-37%	0%	0%
2C5d	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2C5e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
4F	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Ca	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-23%	0%	3%
6Cb	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	156%	0%	3%
6Cc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
6Cd	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0%	0%	2%
6Ce	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	4%	0%	3%
6D	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	-30%	0%	3%
7A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4%	0%	3%
Grand Total	389	278	241	222	200	179	157	140	125	111	104	103	99	-75%	100%	4%

**Table D.5:** Unallocated Carbon Monoxide Emissions in the UK, 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1c	9.0	12.7	15.8	16.1	15.6	16.4	16.5	16.2	16.1	15.3	13.8	14.0	13.3	48%	62%	77%
1A4cii	5.5	7.1	3.0	1.0	0.7	0.5	0.7	0.5	0.5	0.5	0.2	0.2	0.7	-88%	3%	3%
1A5b	14.6	15.5	13.4	11.5	10.9	10.5	10.3	9.1	9.1	10.4	9.1	9.8	7.6	-48%	35%	82%
Grand Total	29.1	35.4	32.2	28.6	27.2	27.4	27.5	25.8	25.7	26.2	23.1	24.1	21.6	-26%	100%	1%

## APPENDIX E: DEVOLVED ADMINISTRATION NO<sub>x</sub> INVENTORIES, 1990-2008

**Table E.1** Nitrogen Oxides (as Nitrogen Dioxide) Emissions Inventory for England 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	614.4	384.2	279.3	246.0	262.7	285.5	270.2	306.5	283.9	303.7	300.5	290.8	207.7	-66%	20%	75%
1A1b	26.7	22.7	23.9	20.2	19.5	18.9	20.3	19.5	21.5	21.2	18.6	16.9	16.8	-37%	2%	68%
1A1c	7.1	7.3	8.7	8.7	9.4	9.9	9.2	9.7	10.6	11.1	7.2	6.9	6.2	-13%	1%	12%
1A2a	12.7	14.8	13.0	12.9	8.6	7.1	7.5	6.5	6.7	6.3	6.3	6.1	5.9	-53%	1%	58%
1A2fi	206.6	177.0	149.8	137.3	137.3	131.9	127.6	128.4	128.4	123.7	114.7	112.7	100.5	-51%	9%	82%
1A2fii	101.2	103.5	103.9	102.7	100.1	97.2	93.9	90.3	90.5	88.9	85.6	84.1	72.2	-29%	7%	83%
1A3ai(i)	4.6	6.2	7.6	8.3	9.1	8.8	8.7	9.0	9.8	10.6	10.6	10.5	10.0	115%	1%	95%
1A3aii(ii)	0.9	0.8	1.0	1.1	1.2	1.2	1.2	1.2	1.4	1.5	1.4	1.3	1.3	45%	0%	61%
1A3bi	533.7	418.4	352.5	329.1	299.3	270.0	247.1	222.0	204.1	187.1	170.0	154.1	141.9	-73%	13%	83%
1A3bii	75.3	73.9	75.3	73.7	73.1	72.8	70.5	69.4	67.9	64.5	56.2	51.2	45.5	-40%	4%	83%
1A3biii	285.5	275.7	269.1	263.6	254.9	246.1	237.2	230.1	227.8	218.0	212.3	203.6	180.7	-37%	17%	81%
1A3biv	1.4	1.0	1.2	1.3	1.3	1.4	1.4	1.5	1.3	1.3	1.2	1.2	1.1	-24%	0%	86%
1A3c	15.1	18.5	24.6	26.7	30.4	33.6	29.6	27.1	28.1	29.3	29.7	29.4	29.7	96%	3%	80%
1A3dii	57.0	50.6	50.8	45.0	43.6	36.3	30.4	54.7	53.1	61.8	83.9	75.0	82.0	44%	8%	69%
1A4ai	30.2	30.7	28.7	29.3	25.8	26.5	22.1	22.2	22.8	21.9	20.8	21.0	21.1	-30%	2%	86%
1A4bi	80.3	83.3	89.6	88.8	90.6	92.8	89.9	91.1	93.2	89.1	85.1	81.5	84.1	5%	8%	82%
1A4bii	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.7	17%	0%	84%
1A4ci	0.9	1.1	0.8	0.8	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6	-31%	0%	77%
1A4cii	45.6	45.6	45.7	44.7	43.3	42.0	40.5	38.3	35.3	32.6	28.3	24.4	21.6	-53%	2%	59%
1A5b	39.0	31.7	26.5	28.1	27.3	25.9	25.0	26.8	28.3	25.9	25.6	26.0	25.9	-34%	2%	85%
1B1b	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	-51%	0%	73%
1B2ai	0.6	9.9	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2c	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	8%	0%	13%
2B2	6.6	1.6	1.7	2.0	1.8	0.9	0.6	0.7	0.7	0.6	0.6	0.6	0.3	-95%	0%	100%
2B5a	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.3	0.4	0.4	0%	0%	91%
2C1	9.9	10.8	9.8	10.1	8.3	9.6	6.8	7.3	7.2	7.3	7.0	6.8	6.6	-33%	1%	70%
2C3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	-33%	0%	78%
4F	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Ca	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-25%	0%	84%
6Cb	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.2	-70%	0%	87%
6Cc	3.8	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Cd	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-1%	0%	85%
6Ce	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1%	0%	84%
6D	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	-33%	0%	84%
Grand Total	2172	1775	1568	1484	1451	1423	1344	1367	1327	1311	1269	1208	1065	-51%	100%	76%

**Table E.2** Nitrogen Oxides (as Nitrogen Dioxide) Emissions Inventory for Scotland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	86.1	55.1	39.7	37.6	44.6	39.7	37.3	36.8	35.7	35.2	48.2	41.7	33.0	-62%	23%	12%
1A1b	5.9	5.0	5.3	4.6	4.3	4.7	5.5	3.6	3.5	3.7	3.7	3.2	3.2	-47%	2%	13%
1A1c	3.0	3.9	4.7	4.8	4.6	4.3	3.9	3.9	3.6	3.6	3.0	3.3	2.7	-9%	2%	5%
1A2a	2.3	0.8	0.4	0.5	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-90%	0%	2%
1A2fi	19.2	15.8	13.9	12.6	13.0	13.5	11.0	10.4	11.1	11.5	11.4	12.0	11.5	-40%	8%	9%
1A2fii	9.4	9.6	9.7	9.6	9.3	9.0	8.7	8.4	8.4	8.2	7.8	7.7	6.6	-30%	5%	8%
1A3ai(i)	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	172%	0%	4%
1A3aii(i)	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5	43%	0%	25%
1A3bi	53.4	41.6	34.7	32.3	29.2	26.2	24.3	21.9	20.1	18.4	16.9	15.4	14.2	-73%	10%	8%
1A3bii	7.7	7.5	7.9	7.8	7.5	7.3	7.2	7.1	6.8	6.5	5.9	5.4	4.8	-38%	3%	9%
1A3biii	32.0	28.9	27.6	27.0	26.0	25.0	24.3	24.3	23.7	23.1	23.0	22.3	20.4	-36%	14%	9%
1A3biv	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0%	0%	7%
1A3c	2.3	2.8	3.7	4.0	4.6	4.5	3.5	3.4	3.7	3.8	3.9	3.8	3.6	56%	2%	10%
1A3dii	21.0	18.7	17.2	16.4	15.7	12.3	10.2	16.3	15.5	17.2	21.3	19.2	20.4	-3%	14%	17%
1A4ai	3.1	2.8	2.7	2.8	2.4	2.6	2.1	2.1	2.2	2.2	2.1	2.1	2.1	-32%	1%	9%
1A4bi	9.1	9.6	9.8	9.5	9.6	10.1	9.5	9.5	9.6	9.4	9.1	8.9	9.3	2%	6%	9%
1A4bii	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	10%	0%	8%
1A4ci	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-48%	0%	11%
1A4cii	13.8	13.8	13.8	13.5	13.1	12.7	12.2	11.6	10.6	10.1	8.7	7.5	6.6	-52%	5%	18%
1A5b	4.2	3.5	2.9	3.0	2.9	2.8	2.7	2.8	2.9	2.7	2.7	2.7	2.7	-35%	2%	9%
1B1b	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2ai	0.0	0.0	0.0	0.4	0.5	0.6	0.6	0.6	0.4	0.6	0.5	0.0	0.2	0%	0%	56%
1B2c	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.1	0.2	0.2	18%	0%	9%
2B2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2B5a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	2%
2C1	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2C3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-95%	0%	2%
4F	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Ca	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-30%	0%	8%
6Cb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-82%	0%	2%
6Cc	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Cd	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	11%
6Ce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5%	0%	8%
6D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-37%	0%	8%
Grand Total	277	221	196	188	189	177	165	165	160	158	170	157	143	-48%	100%	10%

**Table E.3:** Nitrogen Oxides (as Nitrogen Dioxide) Emissions Inventory for Wales 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	42.0	26.1	18.8	13.9	23.9	31.4	25.7	27.0	28.7	26.0	33.1	20.5	31.5	-25%	30%	11%
1A1b	5.9	5.0	5.3	4.9	4.3	4.2	4.4	3.5	4.8	5.7	5.5	5.6	4.6	-22%	4%	19%
1A1c	2.0	4.1	4.6	4.4	4.3	3.6	2.2	1.8	1.5	1.7	2.0	2.4	2.1	8%	2%	4%
1A2a	6.7	11.8	11.6	13.4	7.5	6.3	4.6	5.8	4.9	4.6	4.9	4.2	4.0	-40%	4%	39%
1A2fi	15.1	10.5	10.0	10.6	14.1	12.8	9.9	9.0	9.7	8.8	7.5	7.5	6.8	-55%	6%	6%
1A2fii	6.9	7.1	7.1	7.0	6.8	6.6	6.4	6.2	6.2	6.1	5.9	5.8	5.0	-28%	5%	6%
1A3ai(i)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	173%	0%	0%
1A3aii(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	300%	0%	1%
1A3bi	34.0	26.4	22.0	20.5	18.6	16.8	15.6	14.1	13.1	11.9	11.0	10.0	9.2	-73%	9%	5%
1A3bii	5.0	4.8	4.9	4.8	4.8	4.7	4.7	4.6	4.5	4.2	3.8	3.4	3.0	-39%	3%	6%
1A3biii	16.4	14.8	14.6	13.8	13.0	12.4	11.9	11.5	11.2	10.9	10.6	10.2	9.3	-44%	9%	4%
1A3biv	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-4%	0%	5%
1A3c	2.1	2.6	3.4	3.7	4.2	3.3	2.9	2.8	3.4	3.5	3.6	3.5	3.3	54%	3%	9%
1A3dii	9.5	8.4	7.8	7.1	6.9	5.4	4.4	7.8	8.4	9.3	11.9	10.6	11.8	25%	11%	10%
1A4ai	2.0	1.8	1.4	1.4	1.2	1.3	1.0	1.1	1.1	1.1	1.0	1.0	1.0	-47%	1%	4%
1A4bi	5.4	5.6	6.0	5.9	5.9	6.0	5.8	5.9	6.0	5.7	5.6	5.3	5.6	3%	5%	5%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13%	0%	5%
1A4ci	0.1	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-46%	0%	8%
1A4cii	9.4	9.4	9.4	9.2	8.9	8.7	8.4	7.9	7.3	6.8	5.9	5.1	4.5	-52%	4%	12%
1A5b	1.8	1.4	1.1	1.1	1.1	1.0	1.0	1.1	1.1	1.0	1.0	1.0	1.0	-47%	1%	3%
1B1b	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-59%	0%	27%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	3%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77%	0%	0%
2B2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2B5a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	6%
2C1	5.4	6.8	6.9	7.1	6.9	4.9	1.6	2.0	2.4	2.3	2.8	2.7	2.8	-49%	3%	30%
2C3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-79%	0%	20%
4F	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Ca	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-28%	0%	5%
6Cb	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-33%	0%	11%
6Cc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
6Cd	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-10%	0%	3%
6Ce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2%	0%	5%
6D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-35%	0%	5%
Grand Total	170	148	135	130	133	130	111	112	115	110	116	99	106	-38%	100%	8%

**Table E.4:** Nitrogen Oxides (as Nitrogen Dioxide) Emissions Inventory for Northern Ireland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	30.9	19.2	13.8	14.1	14.8	16.2	12.0	11.2	9.4	8.6	9.3	6.6	6.1	-80%	13%	2%
1A1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1A2fi	7.8	6.3	5.0	4.5	4.0	3.8	3.4	3.3	3.3	4.2	3.9	3.8	4.0	-48%	8%	3%
1A2fii	3.6	3.7	3.7	3.7	3.6	3.5	3.4	3.2	3.2	3.3	3.3	3.2	2.8	-23%	6%	3%
1A3ai(i)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	431%	0%	1%
1A3aii(i)	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	112%	1%	12%
1A3bi	19.0	14.9	12.6	12.2	11.7	10.9	10.0	9.4	9.1	8.6	7.6	7.3	6.5	-66%	14%	4%
1A3bii	2.1	2.2	2.4	2.5	2.6	2.7	2.7	2.6	2.6	2.4	2.2	1.6	1.4	-32%	3%	3%
1A3biii	11.0	11.2	11.0	11.2	11.2	11.1	13.5	14.7	13.1	12.7	13.0	12.3	12.1	11%	25%	5%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6%	0%	2%
1A3c	0.4	0.4	0.5	0.5	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.5	0.5	24%	1%	1%
1A3dii	3.4	3.0	2.8	2.7	2.6	2.1	1.8	3.2	3.3	3.8	5.1	4.5	5.0	48%	10%	4%
1A4ai	1.2	0.8	0.5	0.5	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	-69%	1%	1%
1A4bi	4.3	3.3	3.5	3.5	3.5	3.6	3.6	3.6	3.8	3.7	3.8	3.8	3.8	-13%	8%	4%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20%	0%	3%
1A4ci	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-66%	0%	4%
1A4cii	8.5	8.5	8.5	8.4	8.1	7.8	7.6	7.2	6.6	6.3	5.5	4.7	4.2	-51%	9%	11%
1A5b	1.0	0.9	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	-30%	1%	2%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1B2ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1B2c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2B2	0.7	0.3	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2B5a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2C1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2C3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-16%	0%	0%
4F	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6Ca	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-23%	0%	3%
6Cb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-81%	0%	1%
6Cc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
6Cd	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5%	0%	1%
6Ce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4%	0%	3%
6D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-31%	0%	3%
Grand Total	94.2	75.1	65.6	65.2	64.4	63.8	59.7	60.3	56.2	55.5	55.7	49.8	47.9	-49%	100%	3%

**Table E.5:** Unallocated Nitrogen Oxides (as Nitrogen Dioxide) Emissions in the UK, 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1c	21.9	31.2	38.8	38.4	36.4	36.9	51.5	46.2	47.7	44.9	39.9	39.9	39.3	79%	96%	78%
1A4cii	10.1	0.8	0.6	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-99%	0%	0%
1A5b	2.2	2.7	2.5	2.6	1.9	1.9	2.4	1.6	1.7	1.9	1.6	1.8	1.4	-35%	3%	5%
Grand Total	34.3	34.7	41.9	41.5	38.5	38.9	54.0	47.9	49.4	46.9	41.6	41.8	40.8	19%	100%	3%

## APPENDIX F: DEVOLVED ADMINISTRATION SO<sub>2</sub> INVENTORIES, 1990-2008

**Table F.1** Sulphur Dioxide Emissions Inventory for England 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	2378.2	1388.2	935.08	657.13	678.62	584.67	542.93	544.92	395.87	294.58	256.11	207.52	152.29	-94%	40%	72%
1A1b	95.04	82.19	72.24	62.06	50.26	54.51	47.38	48.93	56.34	57.45	55.11	58.63	51.42	-46%	14%	71%
1A1c	4.44	2.12	4.11	3.44	4.12	3.56	3.22	3.07	3.61	3.34	3.31	4.52	4.05	-9%	1%	79%
1A2a	7.67	8.31	9.81	8.44	6.63	7.97	7.33	4.74	5.35	4.52	5.60	6.46	6.20	-19%	2%	85%
1A2fi	294.25	209.67	120.22	90.58	84.43	85.50	73.03	67.25	68.12	68.07	59.95	58.10	54.37	-82%	14%	84%
1A2fii	8.14	5.56	5.55	5.43	5.20	4.76	5.47	6.07	6.09	6.01	6.07	5.71	3.07	-62%	1%	83%
1A3ai(i)	0.24	0.40	0.60	0.46	0.51	0.54	0.44	0.51	0.59	0.63	0.75	0.66	0.63	160%	0%	94%
1A3aii(i)	0.06	0.08	0.12	0.09	0.10	0.12	0.09	0.11	0.13	0.14	0.15	0.12	0.11	86%	0%	64%
1A3bi	20.95	19.00	11.28	10.15	4.62	2.63	2.29	2.25	2.12	1.81	1.74	1.51	1.07	-95%	0%	84%
1A3bii	4.65	5.04	2.37	0.81	0.38	0.29	0.29	0.30	0.28	0.25	0.19	0.14	0.07	-99%	0%	83%
1A3biii	27.05	18.79	5.67	0.97	0.55	0.54	0.55	0.55	0.50	0.45	0.32	0.23	0.10	-100%	0%	81%
1A3biv	0.17	0.09	0.07	0.08	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-95%	0%	87%
1A3c	1.68	1.06	1.22	1.20	1.15	1.15	1.38	1.53	1.52	1.52	1.54	1.41	0.88	-47%	0%	80%
1A3dii	17.28	18.38	16.26	13.96	12.86	10.85	9.41	16.24	20.56	24.94	34.50	33.56	37.15	115%	10%	69%
1A4ai	61.19	38.10	19.99	16.00	10.29	11.38	5.76	4.26	3.87	4.10	3.65	3.21	4.55	-93%	1%	83%
1A4bi	76.37	55.08	48.26	32.78	32.00	26.63	19.20	17.00	15.68	11.69	12.22	13.38	13.49	-82%	4%	55%
1A4bii	0.09	0.08	0.04	0.04	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	-96%	0%	84%
1A4ci	2.88	3.60	1.89	1.63	0.27	0.25	0.12	0.11	0.16	0.16	0.16	0.14	0.31	-89%	0%	60%
1A4cii	3.58	2.40	2.39	2.30	2.15	1.94	2.21	2.43	2.29	2.19	2.07	1.83	1.11	-69%	0%	59%
1A5b	8.17	6.66	5.37	5.64	5.52	5.16	4.77	5.37	5.87	5.32	5.33	5.42	5.35	-35%	1%	86%
1B1b	16.03	8.81	7.21	6.11	5.93	6.64	5.19	6.60	7.86	6.83	6.86	9.77	8.74	-46%	2%	91%
1B2ai	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
1B2c	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.04	0.05	0.09	0.04	0.05	0.03	43169%	0%	21%
2A7d	4.27	9.67	13.09	8.94	10.51	9.07	12.00	16.37	16.55	17.25	18.39	15.86	17.14	302%	5%	100%
2B5a	39.69	38.24	35.30	30.27	22.25	16.30	12.73	9.72	8.61	7.03	5.57	5.72	4.14	-90%	1%	98%
2C1	9.55	10.58	9.98	10.03	6.04	8.81	7.13	5.34	6.62	6.80	6.52	7.02	7.72	-19%	2%	74%
2C3	1.82	1.50	1.62	2.39	2.55	2.56	2.32	2.54	3.00	3.24	3.07	2.79	2.77	52%	1%	55%
2C5b	1.70	1.66	2.76	1.42	1.20	1.39	0.60	1.40	0.91	1.12	1.19	1.05	1.20	-30%	0%	95%
6Ca	0.32	0.25	0.21	0.22	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24	-25%	0%	84%
6Cb	2.81	2.89	0.70	0.90	0.65	0.40	0.39	0.39	0.37	0.37	0.36	0.37	0.37	-87%	0%	84%
6Cc	3.62	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
6Cd	0.16	0.16	0.16	0.16	0.16	1.21	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0%	0%	84%
Grand Total	3092	1939	1334	974	949	849	767	768	633	530	491	446	379	-88%	100%	74%

**Table F.2** Sulphur Dioxide Emissions Inventory for Scotland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	196.08	119.66	80.99	67.85	96.15	93.28	87.95	76.61	62.78	49.74	59.73	47.00	40.13	-80%	58%	19%
1A1b	20.13	17.41	15.30	13.15	10.77	8.07	8.06	5.58	3.93	3.79	6.21	5.77	6.12	-70%	9%	9%
1A1c	0.40	0.03	0.03	0.22	0.18	0.15	0.11	0.04	0.05	0.04	0.04	0.04	0.08	-80%	0%	2%
1A2a	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
1A2fi	29.79	17.99	8.36	5.75	5.30	5.51	8.25	7.91	8.48	9.06	7.20	6.51	4.98	-83%	7%	8%
1A2fii	0.76	0.52	0.52	0.51	0.48	0.44	0.51	0.56	0.57	0.56	0.56	0.52	0.28	-63%	0%	8%
1A3ai(i)	0.01	0.02	0.03	0.02	0.02	0.03	0.02	0.02	0.03	0.03	0.03	0.03	0.03	154%	0%	4%
1A3aii(i)	0.02	0.03	0.04	0.03	0.03	0.04	0.03	0.04	0.04	0.05	0.05	0.04	0.04	124%	0%	24%
1A3bi	2.03	1.84	1.09	0.97	0.44	0.25	0.22	0.22	0.20	0.17	0.17	0.15	0.10	-95%	0%	8%
1A3bii	0.47	0.50	0.25	0.08	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01	-99%	0%	9%
1A3biii	3.00	1.94	0.57	0.10	0.06	0.06	0.06	0.06	0.05	0.05	0.04	0.03	0.01	-100%	0%	9%
1A3biv	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-93%	0%	6%
1A3c	0.25	0.16	0.18	0.18	0.17	0.15	0.16	0.19	0.20	0.20	0.20	0.18	0.11	-58%	0%	10%
1A3dii	6.38	6.78	5.52	5.08	4.62	3.66	3.17	4.85	5.99	6.92	8.75	8.57	9.26	45%	13%	17%
1A4ai	7.13	4.97	2.51	1.95	1.20	1.39	0.67	0.47	0.40	0.37	0.38	0.34	0.50	-93%	1%	9%
1A4bi	29.39	22.71	20.85	10.05	11.99	8.78	6.98	6.01	5.18	4.08	4.37	4.84	5.37	-82%	8%	22%
1A4bii	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-96%	0%	8%
1A4ci	0.81	1.06	0.56	0.48	0.07	0.07	0.03	0.03	0.04	0.04	0.04	0.04	0.09	-89%	0%	17%
1A4cii	1.07	0.72	0.72	0.69	0.65	0.58	0.67	0.73	0.69	0.67	0.63	0.56	0.34	-68%	0%	18%
1A5b	0.86	0.71	0.54	0.56	0.54	0.51	0.47	0.53	0.58	0.52	0.52	0.53	0.53	-39%	1%	8%
1B1b	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
1B2ai	0.08	0.06	0.24	0.41	0.35	1.20	0.89	0.48	0.45	0.39	0.17	0.17	0.11	43%	0%	8%
1B2c	0.00	0.00	0.00	0.04	0.01	0.03	0.04	0.01	0.03	0.01	0.01	0.01	0.02	3489%	0%	11%
2A7d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
2B5a	0.43	0.35	0.28	0.23	0.16	0.12	0.08	0.04	0.03	0.02	0.02	0.02	0.02	-96%	0%	0%
2C1	1.99	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
2C3	0.72	0.59	0.64	0.66	0.64	0.62	0.56	0.78	0.74	0.74	0.72	0.64	0.63	-12%	1%	13%
2C5b	0.07	0.07	0.12	0.06	0.05	0.06	0.03	0.06	0.04	0.05	0.05	0.05	0.05	-30%	0%	4%
6Ca	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-30%	0%	8%
6Cb	0.09	0.10	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-62%	0%	8%
6Cc	0.11	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
6Cd	0.02	0.02	0.02	0.02	0.02	0.29	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0%	0%	12%
Grand Total	305	198	139	109	134	125	119	105	90.6	77.6	90.0	76.1	68.9	-77%	100%	13%

**Table F.3:** Sulphur Dioxide Emissions Inventory for Wales 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	85.21	49.73	33.50	24.45	47.61	41.39	31.55	37.14	33.88	26.88	31.45	22.10	9.36	-89%	22%	4%
1A1b	22.41	19.38	17.03	14.63	11.86	9.77	10.33	8.77	9.87	11.80	13.81	14.57	14.46	-35%	34%	20%
1A1c	1.07	0.63	1.21	1.02	0.74	0.82	0.32	0.34	0.36	0.42	0.43	0.47	0.43	-60%	1%	8%
1A2a	4.91	8.36	6.22	7.10	6.74	4.96	1.53	0.82	0.70	0.75	1.02	1.31	1.06	-78%	3%	15%
1A2fi	36.74	21.37	12.42	8.86	9.19	10.90	8.56	7.72	5.34	2.88	2.07	2.11	2.24	-94%	5%	3%
1A2fii	0.55	0.38	0.38	0.37	0.35	0.32	0.37	0.41	0.42	0.41	0.42	0.39	0.21	-62%	0%	6%
1A3ai(i)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	233%	0%	0%
1A3aii(i)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	190%	0%	2%
1A3bi	1.30	1.17	0.69	0.62	0.28	0.16	0.14	0.14	0.13	0.11	0.11	0.10	0.07	-95%	0%	5%
1A3bii	0.30	0.33	0.15	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.00	-99%	0%	6%
1A3biii	1.56	1.01	0.31	0.05	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01	-100%	0%	4%
1A3biv	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-93%	0%	5%
1A3c	0.24	0.15	0.17	0.17	0.16	0.11	0.14	0.16	0.18	0.18	0.19	0.17	0.10	-59%	0%	9%
1A3dii	2.87	3.05	2.48	2.21	2.05	1.62	1.35	2.31	3.26	3.77	4.88	4.76	5.35	86%	13%	10%
1A4ai	5.33	3.25	1.73	1.39	0.90	0.99	0.50	0.37	0.33	0.32	0.27	0.26	0.35	-93%	1%	6%
1A4bi	12.21	8.47	7.24	5.87	5.24	4.62	3.17	2.83	2.70	1.92	2.21	2.72	2.89	-76%	7%	12%
1A4bii	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-96%	0%	5%
1A4ci	0.57	0.73	0.38	0.33	0.05	0.05	0.02	0.02	0.03	0.03	0.03	0.03	0.06	-89%	0%	12%
1A4cii	0.74	0.49	0.49	0.47	0.44	0.40	0.46	0.50	0.47	0.46	0.43	0.38	0.23	-69%	1%	12%
1A5b	0.40	0.32	0.24	0.25	0.24	0.23	0.21	0.23	0.26	0.23	0.22	0.22	0.22	-45%	1%	4%
1B1b	4.12	1.98	2.26	1.90	1.38	1.52	0.61	0.69	0.74	0.83	0.89	0.91	0.83	-80%	2%	9%
1B2ai	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0%	0%	1%
1B2c	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2385%	0%	1%
2A7d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
2B5a	1.37	1.12	0.89	0.74	0.50	0.38	0.25	0.13	0.09	0.08	0.07	0.06	0.06	-96%	0%	1%
2C1	5.69	7.21	7.32	7.31	5.22	3.09	1.81	2.61	2.57	2.46	3.81	3.57	2.71	-52%	6%	26%
2C3	1.56	1.28	1.39	1.00	1.59	2.18	1.98	1.42	1.69	1.99	1.77	1.76	1.61	3%	4%	32%
2C5b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
6Ca	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-28%	0%	5%
6Cb	0.06	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-61%	0%	5%
6Cc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
6Cd	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-5%	0%	2%
Grand Total	189	131	96.5	78.9	94.6	83.7	63.4	66.7	63.1	55.6	64.2	56.0	42.3	-78%	100%	8%

**Table F.4:** Sulphur Dioxide Emissions Inventory for Northern Ireland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	68.12	39.75	26.78	26.81	29.18	30.10	18.34	17.43	16.41	13.65	13.44	8.29	10.98	-84%	55%	5%
1A1b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1A1c	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1A2a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1A2fi	17.35	13.81	7.37	4.57	3.61	3.83	2.11	1.84	2.26	3.41	2.94	2.08	3.13	-82%	16%	5%
1A2fii	0.29	0.20	0.20	0.19	0.19	0.17	0.20	0.22	0.22	0.22	0.23	0.22	0.12	-59%	1%	3%
1A3ai(i)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	217%	0%	1%
1A3aii(i)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	192%	0%	10%
1A3bi	0.74	0.81	0.45	0.33	0.15	0.09	0.08	0.08	0.08	0.07	0.06	0.05	0.03	-95%	0%	3%
1A3bii	0.33	0.26	0.10	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	-99%	0%	2%
1A3biii	1.11	0.83	0.26	0.05	0.03	0.03	0.03	0.04	0.03	0.03	0.02	0.02	0.01	-99%	0%	6%
1A3biv	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-94%	0%	2%
1A3c	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.02	-37%	0%	2%
1A3dii	1.02	1.09	0.89	0.83	0.76	0.63	0.55	0.96	1.27	1.53	2.11	2.01	2.26	121%	11%	4%
1A4ai	5.26	3.20	1.73	1.38	0.89	0.97	0.49	0.37	0.33	0.33	0.33	0.29	0.08	-98%	0%	1%
1A4bi	24.13	14.34	10.79	7.27	7.77	5.86	4.82	4.31	3.31	2.41	2.50	2.86	2.88	-88%	14%	12%
1A4bii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-95%	0%	3%
1A4ci	0.52	0.66	0.35	0.30	0.05	0.04	0.02	0.02	0.03	0.02	0.03	0.02	0.06	-89%	0%	11%
1A4cii	0.67	0.45	0.45	0.43	0.40	0.36	0.41	0.45	0.43	0.42	0.40	0.35	0.21	-68%	1%	11%
1A5b	0.20	0.18	0.14	0.15	0.15	0.14	0.13	0.14	0.16	0.14	0.14	0.15	0.14	-30%	1%	2%
1B1b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1B2ai	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1B2c	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
2A7d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
2B5a	0.10	0.08	0.07	0.06	0.04	0.03	0.02	0.01	0.01	0.01	0.01	0.00	0.00	-96%	0%	0%
2C1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
2C3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
2C5b	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.01	-30%	0%	0%
6Ca	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-23%	0%	3%
6Cb	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-58%	0%	3%
6Cc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
6Cd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1%	0%	1%
Grand Total	120	75.8	49.6	42.5	43.3	42.3	27.3	25.9	24.6	22.3	22.3	16.4	20.0	-83%	100%	4%

**Table F.5:** Unallocated Sulphur Dioxide Emissions in the UK, 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1c	0.41	0.58	0.73	4.17	3.22	3.11	0.44	0.52	0.39	0.34	0.46	0.26	0.56	37%	30%	11%
1A4cii	7.59	6.22	0.85	0.79	0.67	0.00	0.05	0.51	0.58	0.61	0.59	0.00	1.22	-84%	64%	64%
1A5b	0.12	0.33	0.28	0.50	0.34	0.38	0.19	0.20	0.24	0.16	0.15	0.17	0.12	-1%	6%	2%
Grand Total	8.1	7.1	1.9	5.5	4.2	3.5	0.7	1.2	1.2	1.1	1.2	0.4	1.9	-77%	100%	0%

## APPENDIX G: DEVOLVED ADMINISTRATION NMVOC INVENTORIES, 1990-2008

**Table G.1** Non Methane Volatile Organic Compounds (NMVOC) Emissions Inventory for England 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	5.23	5.52	2.45	2.65	3.54	3.15	3.75	2.95	3.30	2.79	3.76	3.20	2.69	-49%	0%	77%
1A1b	0.46	0.51	0.50	0.47	0.47	0.44	0.46	0.42	0.45	0.49	0.42	0.41	0.44	-5%	0%	71%
1A1c	0.16	0.15	0.19	0.17	0.14	0.13	0.14	0.14	0.19	0.30	0.14	0.15	0.15	-5%	0%	28%
1A2a	0.33	0.36	0.34	0.32	0.26	0.27	0.29	0.29	0.27	0.28	0.28	0.28	0.25	-25%	0%	64%
1A2fi	3.52	3.83	3.92	3.50	3.18	3.37	2.96	2.93	2.71	2.58	2.19	2.34	2.29	-35%	0%	81%
1A2fii	19.20	19.64	19.74	19.74	19.64	19.58	19.45	19.22	19.79	19.88	19.52	19.44	16.87	-12%	3%	83%
1A3ai(i)	2.92	1.94	1.91	1.67	1.40	1.10	1.02	0.99	0.94	0.98	0.97	0.92	0.87	-70%	0%	90%
1A3aii(i)	0.99	0.73	0.84	0.95	0.98	1.06	0.93	0.90	0.87	0.84	0.76	0.55	0.50	-49%	0%	73%
1A3bi	465.11	375.57	305.37	277.94	238.28	206.94	180.41	157.19	137.33	119.13	105.46	94.26	85.71	-82%	13%	84%
1A3bii	56.45	46.03	35.32	28.65	22.58	18.22	14.22	11.69	9.70	8.12	7.19	6.53	5.97	-89%	1%	84%
1A3biii	20.07	18.97	15.92	14.37	13.82	12.26	11.15	10.32	9.73	8.90	8.21	7.15	5.60	-72%	1%	81%
1A3biv	21.00	10.21	10.06	11.07	9.65	9.06	8.88	9.38	7.94	7.63	6.45	6.43	5.11	-76%	1%	89%
1A3bv	173.83	135.10	83.11	69.68	53.41	42.85	36.78	30.64	24.25	19.23	15.50	12.14	8.75	-95%	1%	84%
1A3c	2.29	2.25	2.63	2.77	3.10	3.41	2.97	2.70	2.75	2.82	2.87	2.84	2.92	27%	0%	80%
1A3dii	2.76	2.45	2.46	2.18	2.11	1.76	1.47	2.65	2.57	2.99	4.06	3.63	3.97	44%	1%	69%
1A4ai	0.80	0.93	0.93	0.95	0.93	0.95	0.82	0.84	0.85	0.81	0.78	0.75	0.80	0%	0%	86%
1A4bi	38.60	25.58	27.10	28.85	22.90	21.12	18.38	17.86	18.70	19.23	19.48	21.51	23.52	-39%	4%	51%
1A4bii	12.37	13.03	12.28	12.04	11.82	11.70	11.61	11.52	10.96	9.80	8.74	7.62	6.46	-48%	1%	84%
1A4ci	1.71	1.70	1.70	1.73	1.71	1.72	1.71	1.71	1.69	1.70	1.69	1.68	1.70	-1%	0%	93%
1A4cii	6.51	6.51	6.52	6.39	6.20	6.03	5.86	5.66	5.37	5.23	4.64	4.16	3.83	-41%	1%	59%
1A5b	2.87	2.34	2.09	2.15	2.09	2.03	2.05	2.16	2.22	2.09	2.10	2.12	2.12	-26%	0%	85%
1B1b	0.20	0.11	0.11	0.11	0.08	0.07	0.07	0.07	0.08	0.08	0.10	0.09	0.09	-53%	0%	72%
1B2ai	66.57	48.14	39.55	46.99	55.24	52.72	36.04	29.93	26.40	25.79	20.70	21.12	19.14	-71%	3%	30%
1B2ai	0.28	0.43	0.21	0.11	0.16	0.17	0.13	0.15	0.12	0.12	0.18	0.10	0.09	-68%	0%	98%
1B2aiv	65.92	57.41	38.57	30.53	29.02	24.85	23.43	22.57	20.76	21.29	19.68	19.11	18.60	-72%	3%	63%
1B2av	92.82	82.83	74.01	51.89	47.94	46.14	44.58	42.84	39.44	35.45	33.66	30.30	26.25	-72%	4%	79%
1B2b	35.54	33.24	55.23	55.28	52.13	54.59	54.17	38.80	40.13	39.89	36.76	34.23	30.62	-14%	5%	88%
1B2c	2.46	1.92	2.38	2.32	2.80	2.96	2.66	1.31	1.96	2.47	2.07	1.85	1.69	-31%	0%	7%
2A6	0.20	0.21	0.17	0.17	0.16	0.17	0.17	0.17	0.14	0.15	0.16	0.15	0.15	-22%	0%	86%
2A7d	3.02	2.13	1.97	0.77	1.78	1.36	1.48	1.29	1.31	1.88	3.01	3.58	2.75	-9%	0%	98%
2B5a	144.77	128.97	97.62	59.34	55.05	46.63	47.52	42.03	33.46	32.13	23.39	20.67	18.66	-87%	3%	74%
2C1	1.41	1.42	1.39	1.31	1.15	1.17	1.21	1.27	1.62	1.73	1.29	1.33	1.26	-11%	0%	67%
2D2	27.48	27.66	27.55	27.87	26.88	27.42	27.27	27.60	27.59	26.40	25.98	25.94	26.04	-5%	4%	32%
2D3	3.60	3.23	0.16	0.17	0.16	0.17	0.19	0.20	0.21	0.20	0.20	0.13	0.13	-96%	0%	84%
3A1	54.46	40.94	41.28	42.17	43.49	46.77	48.97	49.32	49.66	46.98	48.19	47.86	44.36	-19%	7%	84%
3A2	110.77	79.26	69.69	63.90	56.23	51.16	47.64	48.21	47.46	47.11	47.10	46.17	41.66	-62%	6%	85%
3A3	6.77	5.47	5.93	5.27	6.31	5.69	5.14	5.20	5.24	4.67	5.80	5.35	5.06	-25%	1%	85%
3B1	63.62	40.35	36.79	34.36	33.45	30.65	27.72	24.39	23.44	22.29	21.82	21.91	21.48	-66%	3%	84%
3B2	8.90	6.62	5.26	4.81	4.19	4.14	4.07	4.01	3.95	3.89	3.83	3.78	3.84	-57%	1%	88%
3C	49.72	41.19	32.86	25.32	19.52	15.40	14.03	13.70	13.32	12.80	12.67	12.46	11.97	-76%	2%	85%
3D1	41.62	41.57	40.80	36.35	25.97	21.31	18.49	16.35	14.47	16.44	15.62	14.76	13.24	-68%	2%	85%

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
3D2	109.23	104.13	99.37	99.52	101.20	104.19	104.70	103.42	104.40	105.98	105.51	107.13	107.19	-2%	16%	84%
3D3	111.93	90.70	84.25	79.39	77.72	75.64	74.47	76.79	78.76	80.41	80.00	80.02	80.17	-28%	12%	84%
4F	23.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
6A	18.89	16.78	13.97	12.78	12.00	10.51	9.59	8.40	7.75	7.61	7.58	7.54	7.44	-61%	1%	78%
6Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-25%	0%	84%
6Cb	0.18	0.19	0.27	0.21	0.23	0.16	0.14	0.14	0.25	0.31	0.36	0.25	0.25	39%	0%	89%
6Cc	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
6Cd	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	0%	0%	84%
6Ce	3.45	3.45	3.46	3.46	3.46	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	1%	1%	84%
6D	1.99	1.95	1.52	1.70	1.55	1.65	1.69	1.84	1.49	1.41	1.43	1.34	1.34	-32%	0%	84%
Grand Total	1889	1535	1311	1176	1078	998	926	857	811	778	737	710	669	-65%	100%	71%

**Table G.2** Non Methane Volatile Organic Compounds (NMVOC) Emissions Inventory for Scotland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	0.63	0.68	0.31	0.23	0.42	0.30	0.39	0.32	0.44	0.41	0.54	0.40	0.42	-33%	0%	12%
1A1b	0.07	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.08	0.07	0.07	0.07	-9%	0%	11%
1A1c	0.11	0.15	0.20	0.07	0.07	0.09	0.06	0.07	0.06	0.06	0.05	0.05	0.04	-64%	0%	7%
1A2a	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-96%	0%	1%
1A2fi	0.33	0.39	0.40	0.37	0.35	0.38	0.34	0.34	0.26	0.24	0.23	0.30	0.28	-15%	0%	10%
1A2fii	1.79	1.83	1.84	1.84	1.83	1.82	1.81	1.79	1.84	1.83	1.79	1.78	1.54	-14%	1%	8%
1A3ai(i)	0.14	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.10	0.10	0.10	0.09	-35%	0%	9%
1A3aii(i)	0.35	0.14	0.13	0.14	0.15	0.14	0.13	0.14	0.15	0.16	0.16	0.13	0.12	-64%	0%	18%
1A3bi	43.51	35.09	28.55	25.56	22.09	19.16	16.87	14.74	12.90	11.16	10.01	8.95	8.15	-81%	5%	8%
1A3bii	5.40	4.40	3.48	2.82	2.19	1.75	1.39	1.15	0.95	0.80	0.72	0.66	0.61	-89%	0%	9%
1A3biii	2.39	2.03	1.66	1.49	1.43	1.26	1.15	1.09	1.02	0.95	0.90	0.79	0.64	-73%	0%	9%
1A3biv	0.53	0.45	0.46	0.51	0.47	0.45	0.46	0.49	0.42	0.40	0.34	0.34	0.29	-46%	0%	5%
1A3bv	16.80	13.03	7.99	6.64	5.08	4.06	3.53	2.94	2.33	1.84	1.50	1.18	0.85	-95%	1%	8%
1A3c	0.35	0.34	0.40	0.42	0.47	0.46	0.35	0.34	0.36	0.37	0.38	0.36	0.35	1%	0%	10%
1A3dii	1.02	0.90	0.83	0.79	0.76	0.59	0.50	0.79	0.75	0.83	1.03	0.93	0.99	-3%	1%	17%
1A4ai	0.08	0.08	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.07	0.08	-5%	0%	8%
1A4bi	10.02	6.37	6.32	6.37	5.23	4.67	4.04	4.04	3.90	3.92	5.48	6.04	6.81	-32%	5%	15%
1A4bii	1.32	1.38	1.28	1.25	1.22	1.20	1.18	1.17	1.11	0.99	0.88	0.77	0.65	-51%	0%	8%
1A4ci	0.10	0.11	0.10	0.09	0.10	0.09	0.09	0.09	0.10	0.10	0.11	0.12	0.10	-1%	0%	6%
1A4cii	1.97	1.97	1.97	1.93	1.87	1.82	1.77	1.71	1.62	1.61	1.43	1.28	1.18	-40%	1%	18%
1A5b	0.32	0.27	0.24	0.24	0.24	0.23	0.24	0.25	0.25	0.23	0.24	0.24	0.25	-24%	0%	10%
1B1b	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
1B2ai	140.08	85.37	71.43	60.39	58.36	49.19	47.73	36.98	23.69	25.91	23.63	24.27	21.84	-84%	15%	34%
1B2ai	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1B2aiv	21.80	18.24	12.42	9.58	9.04	5.96	5.54	5.64	6.16	5.31	5.40	4.72	4.43	-80%	3%	15%
1B2av	9.01	8.02	7.14	4.96	4.55	4.39	4.24	4.09	3.78	3.38	3.24	2.92	2.52	-72%	2%	8%
1B2b	2.87	2.69	4.47	4.47	4.70	4.68	4.77	3.03	3.18	3.08	2.79	2.68	2.49	-13%	2%	7%
1B2c	2.50	2.16	2.20	1.89	2.02	3.83	8.95	2.41	2.09	2.27	1.95	2.77	3.46	38%	2%	15%
2A6	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.01	0.01	-27%	0%	8%
2A7d	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.03	0.03	0.02	9%	0%	1%
2B5a	17.28	15.37	12.30	11.63	11.50	10.15	10.09	8.85	7.66	7.32	7.80	8.35	6.25	-64%	4%	25%
2C1	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-90%	0%	0%
2D2	42.27	43.95	48.21	49.24	48.63	49.30	49.05	49.00	48.90	48.50	48.28	49.44	51.22	21%	34%	64%
2D3	0.25	0.23	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-96%	0%	6%
3A1	5.80	4.33	4.31	4.38	4.49	4.79	4.99	5.00	5.03	4.75	4.86	4.82	4.46	-23%	3%	8%
3A2	10.18	7.02	6.43	4.59	4.07	3.69	3.44	3.48	3.40	3.41	3.61	3.58	3.20	-69%	2%	7%
3A3	0.46	0.37	0.40	0.36	0.43	0.38	0.35	0.35	0.35	0.31	0.39	0.36	0.34	-25%	0%	6%
3B1	6.77	4.23	3.81	3.54	3.43	3.12	2.80	2.45	2.36	2.23	2.18	2.19	2.14	-68%	1%	8%
3B2	0.72	0.53	0.42	0.39	0.34	0.33	0.33	0.32	0.32	0.31	0.31	0.31	0.31	-57%	0%	7%
3C	4.98	4.31	4.23	1.74	1.16	1.18	1.16	1.16	1.15	1.12	1.11	1.10	1.19	-76%	1%	8%
3D1	3.76	3.82	3.75	2.97	2.20	1.62	1.53	1.34	1.16	1.31	1.23	1.21	1.12	-70%	1%	7%
3D2	11.84	11.16	10.52	10.50	10.60	10.83	10.83	10.66	10.75	10.88	10.80	10.96	10.94	-8%	7%	9%
3D3	14.46	12.26	10.79	9.83	9.25	8.61	8.04	8.27	8.34	8.43	8.34	8.39	8.42	-42%	6%	9%
4F	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
6A	2.65	2.36	1.96	1.80	1.69	1.40	1.30	1.14	1.10	1.09	1.16	1.16	1.22	-54%	1%	13%
6Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-30%	0%	8%
6Cb	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	134%	0%	5%
6Cc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%
6Cd	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0%	0%	13%
6Ce	0.37	0.36	0.36	0.36	0.36	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	-5%	0%	8%
6D	0.21	0.21	0.16	0.18	0.16	0.17	0.17	0.19	0.15	0.14	0.14	0.14	0.13	-36%	0%	8%
Grand Total	388	297	262	234	222	203	201	177	159	157	154	155	150	-61%	100%	16%

**Table G.3:** Non Methane Volatile Organic Compounds (NMVOC) Emissions Inventory for Wales 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	0.87	0.92	0.40	0.33	0.45	0.34	0.40	0.34	0.29	0.21	0.23	0.40	0.19	-78%	0%	5%
1A1b	0.12	0.13	0.13	0.13	0.12	0.11	0.12	0.11	0.13	0.13	0.11	0.11	0.11	-7%	0%	18%
1A1c	0.04	0.05	0.07	0.07	0.07	0.06	0.04	0.04	0.02	0.02	0.02	0.03	0.03	-35%	0%	5%
1A2a	0.20	0.27	0.30	0.31	0.25	0.17	0.11	0.16	0.15	0.15	0.16	0.15	0.14	-32%	0%	35%
1A2fi	0.28	0.26	0.30	0.35	0.54	0.47	0.46	0.49	0.34	0.17	0.19	0.19	0.17	-38%	0%	6%
1A2fii	1.31	1.34	1.34	1.35	1.34	1.33	1.33	1.31	1.35	1.36	1.34	1.34	1.16	-11%	2%	6%
1A3ai(i)	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	-62%	0%	0%
1A3aii(i)	0.03	0.01	0.02	0.03	0.04	0.04	0.02	0.02	0.04	0.04	0.04	0.03	0.03	-12%	0%	4%
1A3bi	27.86	22.44	18.21	16.52	14.17	12.33	10.87	9.55	8.43	7.28	6.52	5.86	5.34	-81%	11%	5%
1A3bii	3.47	2.82	2.16	1.76	1.38	1.11	0.89	0.73	0.61	0.51	0.45	0.41	0.38	-89%	1%	5%
1A3biii	1.26	1.05	0.88	0.77	0.72	0.63	0.57	0.52	0.49	0.45	0.42	0.37	0.29	-77%	1%	4%
1A3biv	0.46	0.39	0.40	0.44	0.40	0.39	0.38	0.39	0.34	0.33	0.28	0.28	0.24	-49%	0%	4%
1A3bv	10.75	8.33	5.09	4.26	3.26	2.62	2.27	1.91	1.53	1.20	0.98	0.77	0.56	-95%	1%	5%
1A3c	0.32	0.31	0.37	0.39	0.43	0.33	0.29	0.28	0.33	0.33	0.35	0.33	0.32	0%	1%	9%
1A3dii	0.46	0.41	0.38	0.34	0.34	0.26	0.21	0.38	0.41	0.45	0.57	0.51	0.57	25%	1%	10%
1A4ai	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-17%	0%	4%
1A4bi	7.27	4.69	5.03	5.47	4.19	3.86	3.28	3.19	3.39	3.53	4.35	4.97	5.45	-25%	11%	12%
1A4bii	0.74	0.78	0.73	0.71	0.70	0.69	0.68	0.68	0.65	0.57	0.51	0.44	0.38	-49%	1%	5%
1A4ci	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	29%	0%	1%
1A4cii	1.34	1.34	1.35	1.32	1.28	1.24	1.21	1.17	1.11	1.09	0.97	0.86	0.80	-41%	2%	12%
1A5b	0.13	0.10	0.08	0.08	0.07	0.07	0.07	0.08	0.08	0.07	0.07	0.07	0.07	-46%	0%	3%
1B1b	0.10	0.16	0.15	0.15	0.12	0.10	0.06	0.05	0.02	0.02	0.04	0.04	0.04	-65%	0%	28%
1B2ai	0.92	1.65	1.32	1.25	1.13	0.53	0.43	0.41	0.38	0.37	0.35	0.40	0.24	-74%	0%	0%
1B2ai	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74%	0%	2%
1B2aiv	12.62	11.35	7.55	6.19	7.20	6.06	6.37	5.79	6.40	5.98	6.59	7.07	6.70	-47%	13%	23%
1B2av	6.60	5.71	4.89	3.40	3.60	3.05	3.04	2.92	2.64	2.35	2.39	2.16	1.96	-70%	4%	6%
1B2b	1.70	1.59	2.65	2.65	2.66	2.27	2.49	1.96	2.43	2.30	2.14	2.39	1.66	-3%	3%	5%
1B2c	0.44	0.22	0.59	0.52	0.53	0.51	0.39	0.44	0.43	0.43	0.60	0.65	0.66	49%	1%	3%
2A6	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-33%	0%	4%
2A7d	0.08	0.08	0.08	0.07	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-65%	0%	1%
2B5a	2.69	2.40	2.63	2.15	1.70	1.25	0.47	2.85	2.15	0.29	0.38	0.26	0.20	-92%	0%	1%
2C1	0.93	0.95	0.98	0.92	0.86	0.62	0.32	0.51	0.58	0.60	0.64	0.66	0.62	-33%	1%	33%
2D2	1.48	1.48	1.45	1.45	1.39	1.41	1.41	1.43	1.43	1.37	1.37	1.36	1.36	-8%	3%	2%
2D3	0.25	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-96%	0%	6%
3A1	3.27	2.45	2.46	2.50	2.57	2.75	2.88	2.91	2.93	2.76	2.82	2.79	2.58	-21%	5%	5%
3A2	11.45	8.17	5.99	5.37	4.32	3.81	3.33	3.39	3.30	3.73	3.67	3.54	3.12	-73%	6%	6%
3A3	0.55	0.44	0.48	0.42	0.51	0.46	0.41	0.42	0.42	0.38	0.47	0.43	0.41	-25%	1%	7%
3B1	3.82	2.43	2.21	2.06	2.00	1.83	1.66	1.46	1.41	1.33	1.30	1.30	1.28	-67%	3%	5%
3B2	0.31	0.23	0.18	0.17	0.15	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	-57%	0%	3%
3C	5.46	4.48	3.17	2.85	1.74	0.74	0.74	0.71	0.69	0.65	0.65	0.64	0.64	-88%	1%	5%
3D1	3.56	3.60	3.56	3.54	1.14	1.13	1.10	0.99	0.90	1.05	1.00	0.91	0.96	-73%	2%	6%
3D2	6.38	6.10	5.79	5.77	5.88	6.00	6.04	5.97	6.03	6.10	6.04	6.13	6.12	-4%	12%	5%
3D3	8.90	6.33	4.97	4.65	4.51	4.36	4.22	4.31	4.36	4.37	4.29	4.25	4.26	-52%	8%	4%
4F	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
6A	1.32	1.17	0.97	0.89	0.84	0.74	0.67	0.60	0.59	0.59	0.56	0.57	0.56	-58%	1%	6%
6Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-28%	0%	5%
6Cb	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	-35%	0%	4%
6Cc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
6Cd	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0%	0%	2%
6Ce	0.21	0.21	0.21	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	-2%	0%	5%
6D	0.12	0.12	0.09	0.10	0.09	0.10	0.10	0.11	0.09	0.08	0.08	0.08	0.08	-34%	0%	5%
Grand Total	130	107	89.7	82.0	73.1	64.3	59.8	59.1	57.3	53.1	53.5	53.2	50.1	-62%	100%	5%

**Table G.4:** Non Methane Volatile Organic Compounds (NMVOC) Emissions Inventory for Northern Ireland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	0.34	0.36	0.16	0.17	0.20	0.04	0.03	0.03	0.21	0.30	0.35	0.08	0.20	-41%	1%	6%
1A1b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1A1c	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1A2a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1A2fi	0.14	0.14	0.16	0.14	0.06	0.05	0.05	0.07	0.05	0.07	0.07	0.08	0.07	-48%	0%	3%
1A2fii	0.69	0.70	0.71	0.71	0.70	0.70	0.70	0.69	0.71	0.74	0.75	0.75	0.65	-6%	2%	3%
1A3ai(i)	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	13%	0%	1%
1A3aii(i)	0.10	0.09	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.05	0.05	0.04	0.03	-66%	0%	5%
1A3bi	14.24	11.26	8.78	8.09	7.07	6.09	5.02	4.38	3.90	3.38	2.95	2.76	2.48	-83%	8%	2%
1A3bii	0.76	0.71	0.58	0.53	0.46	0.42	0.36	0.33	0.29	0.26	0.24	0.20	0.19	-75%	1%	3%
1A3biii	0.97	0.95	0.78	0.73	0.72	0.65	0.73	0.74	0.63	0.58	0.56	0.48	0.42	-56%	1%	6%
1A3biv	0.39	0.20	0.23	0.25	0.21	0.20	0.21	0.27	0.22	0.22	0.17	0.18	0.14	-65%	0%	2%
1A3bv	5.33	4.05	2.36	2.02	1.57	1.24	1.01	0.84	0.67	0.53	0.42	0.34	0.24	-95%	1%	2%
1A3c	0.06	0.05	0.06	0.06	0.07	0.08	0.06	0.05	0.06	0.06	0.06	0.08	0.08	36%	0%	2%
1A3dii	0.16	0.14	0.13	0.13	0.12	0.10	0.09	0.16	0.16	0.18	0.25	0.22	0.24	48%	1%	4%
1A4ai	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-10%	0%	2%
1A4bi	20.27	13.47	12.73	12.14	11.64	11.07	10.57	10.03	9.58	9.34	9.42	9.73	9.96	-51%	33%	22%
1A4bii	0.41	0.45	0.42	0.41	0.41	0.40	0.40	0.39	0.37	0.33	0.30	0.26	0.22	-46%	1%	3%
1A4ci	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	56%	0%	1%
1A4cii	1.22	1.22	1.22	1.19	1.16	1.13	1.10	1.06	1.00	1.01	0.90	0.80	0.74	-39%	2%	11%
1A5b	0.07	0.06	0.05	0.06	0.06	0.05	0.05	0.06	0.06	0.05	0.06	0.06	0.06	-24%	0%	2%
1B1b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1B2ai	0.05	0.10	0.08	0.08	0.07	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	-72%	0%	0%
1B2ai	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1B2av	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1B2av	2.76	2.42	2.07	1.48	1.40	1.32	1.21	1.16	1.09	0.98	0.90	0.85	0.72	-74%	2%	2%
1B2b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
1B2c	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
2A6	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-16%	0%	2%
2A7d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9%	0%	0%
2B5a	0.37	0.33	0.19	0.04	0.05	0.04	0.05	0.04	0.06	0.07	0.09	0.08	0.09	-76%	0%	0%
2C1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-36%	0%	0%
2D2	1.81	1.86	1.95	1.97	1.91	1.93	1.92	1.93	1.92	1.91	1.91	1.94	1.98	10%	7%	2%
2D3	0.19	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-96%	0%	5%
3A1	1.82	1.40	1.42	1.45	1.49	1.60	1.67	1.68	1.70	1.61	1.65	1.65	1.53	-16%	5%	3%
3A2	3.06	2.07	1.98	1.82	1.60	1.48	1.40	1.43	1.41	1.43	1.44	1.41	1.26	-59%	4%	3%
3A3	0.23	0.18	0.20	0.18	0.21	0.19	0.17	0.17	0.18	0.16	0.19	0.18	0.17	-25%	1%	3%
3B1	2.13	1.39	1.28	1.19	1.16	1.06	0.96	0.84	0.81	0.77	0.76	0.76	0.75	-65%	3%	3%
3B2	0.19	0.14	0.11	0.11	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	-57%	0%	2%
3C	0.64	0.60	0.45	0.40	0.38	0.35	0.34	0.34	0.34	0.33	0.31	0.30	0.29	-56%	1%	2%
3D1	0.37	0.40	0.38	0.40	0.38	0.40	0.40	0.34	0.28	0.36	0.34	0.34	0.31	-16%	1%	2%
3D2	3.59	3.51	3.38	3.37	3.43	3.51	3.53	3.48	3.52	3.58	3.57	3.64	3.65	2%	12%	3%
3D3	5.31	4.09	3.58	3.25	3.06	2.78	2.62	2.67	2.69	2.72	2.70	2.72	2.70	-49%	9%	3%
4F	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	0%	0%

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
6A	0.77	0.68	0.57	0.52	0.49	0.43	0.39	0.34	0.34	0.35	0.35	0.36	0.38	-51%	1%	4%
6Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-23%	0%	3%
6Cb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	156%	0%	2%
6Cc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
6Cd	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0%	0%	2%
6Ce	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	4%	0%	3%
6D	0.07	0.07	0.05	0.06	0.05	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	-30%	0%	3%
Grand Total	68.9	53.5	46.4	43.2	40.5	37.8	35.5	34.0	32.7	31.7	31.1	30.7	29.9	-57%	100%	3%

**Table G.5:** Unallocated Non Methane Volatile Organic Compounds (NMVOC) Emissions in the UK, 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1c	0.25	0.36	0.44	0.58	0.47	0.57	0.65	0.57	0.73	0.55	0.36	0.36	0.33	29%	1%	60%
1A4cii	52.35	53.91	51.06	50.38	53.39	67.43	70.10	52.40	38.72	30.26	32.82	40.75	22.88	-56%	53%	350%
1B1b	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	0%	4%	1452%
1B2ai	38.40	37.18	28.11	23.25	19.65	18.40	22.24	18.76	26.38	17.54	17.63	20.09	17.84	-54%	42%	19430%
Grand Total	92.9	93.4	81.5	76.1	75.4	88.3	94.9	73.6	67.7	50.2	52.7	63.1	43.0	-54%	100%	5%

## APPENDIX H: DEVOLVED ADMINISTRATION NH<sub>3</sub> INVENTORIES, 1990-2008

**Table H.1** Ammonia Emissions Inventory for England 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	0.0	0.3	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	2777%	0%	81%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-95%	0%	99%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-95%	0%	50%
1A2fi	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	51%	0%	84%
1A2fii	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-2%	0%	83%
1A3bi	0.6	5.7	11.6	13.4	19.0	17.6	16.4	14.9	13.9	12.8	11.9	10.8	9.8	1648%	5%	83%
1A3bii	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	267%	0%	83%
1A3biii	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	15%	0%	80%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6%	0%	87%
1A4ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18%	0%	97%
1A4bi	2.8	2.0	1.8	2.0	1.6	1.6	1.3	1.1	1.1	0.9	0.9	1.0	1.0	-63%	1%	59%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18%	0%	84%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6%	0%	93%
1A4cii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-21%	0%	59%
1A5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	120%	0%	83%
1B1b	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-10%	0%	91%
1B2aiv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	-22%	0%	83%
2A7d	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.4	0.4	0.4	0.4	0.4	0.3	-3%	0%	79%
2B5a	5.9	5.9	7.4	3.4	2.3	2.4	2.2	2.0	1.9	4.0	3.9	3.7	3.1	-47%	2%	99%
2C5e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-33%	0%	100%
2D1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1%	0%	86%
2D2	0.8	0.8	1.0	1.1	0.9	0.8	1.0	0.9	0.9	0.9	0.7	0.7	0.8	-5%	0%	100%
3D2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1%	1%	84%
4B13	15.1	14.4	14.4	14.5	14.3	13.9	13.7	14.1	14.2	14.2	16.1	13.7	14.4	-5%	8%	79%
4B1a	57.4	54.0	51.5	52.3	49.7	48.5	48.2	47.6	46.2	44.5	47.1	45.1	44.1	-23%	23%	63%
4B1b	40.6	39.9	38.7	38.6	37.7	35.1	33.7	34.4	35.6	35.0	32.3	33.3	32.6	-20%	17%	53%
4B3	6.5	6.3	6.4	6.4	6.1	5.2	5.0	5.1	5.2	5.0	5.0	4.9	4.9	-25%	3%	46%
4B6	2.0	2.5	3.1	2.7	2.8	2.8	3.0	2.9	3.3	3.4	3.8	3.8	3.6	84%	2%	76%
4B8	35.6	33.1	33.0	29.8	26.3	23.2	21.8	19.0	19.2	17.8	18.1	17.1	16.2	-55%	9%	82%
4B9a	10.4	8.7	8.1	8.0	7.6	7.9	7.5	7.3	7.3	7.3	7.0	6.5	6.1	-41%	3%	77%
4B9d	19.7	17.9	22.4	24.0	22.1	23.2	21.4	20.6	20.6	19.5	20.0	17.7	17.4	-12%	9%	77%
4D1a	41.5	30.1	21.1	25.3	21.8	23.9	25.2	21.1	25.1	24.7	23.5	26.0	21.1	-49%	11%	66%
4F	3.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.4	0.4	-87%	0%	84%
6A	2.2	2.9	3.2	3.3	3.4	3.3	3.4	3.3	3.1	2.9	2.6	2.4	2.2	-2%	1%	78%
6B	4.5	4.9	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	1%	2%	84%
6Cb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	117%	0%	83%
6Cc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6D	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0	1.2	1.6	2.2	209%	1%	66%
7A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	-17%	0%	84%
Grand Total	252	234	233	235	226	220	214	204	207	203	204	197	188	-25%	100%	67%

**Table H.2** Ammonia Emissions Inventory for Scotland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3076%	0%	11%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1A2fi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-83%	0%	1%
1A2fii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3%	0%	8%
1A3bi	0.1	0.6	1.2	1.3	1.9	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1.0	1706%	3%	9%
1A3bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	288%	0%	9%
1A3biii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16%	0%	9%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35%	0%	6%
1A4ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14%	0%	3%
1A4bi	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	-50%	1%	18%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12%	0%	8%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-12%	0%	6%
1A4cii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-19%	0%	18%
1A5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	102%	0%	13%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
1B2aiv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-22%	0%	4%
2A7d	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	-3%	0%	12%
2B5a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-45%	0%	0%
2C5e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2D1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6%	0%	8%
2D2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
3D2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-5%	0%	8%
4B13	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.5	1.7	1.5	1.6	1.6	7%	4%	9%
4B1a	7.0	6.7	6.7	6.8	6.5	6.4	6.6	6.6	6.6	6.7	7.3	7.2	7.1	1%	20%	10%
4B1b	13.7	13.8	14.1	13.9	13.8	12.9	13.2	13.4	13.4	13.7	12.6	12.5	12.1	-11%	34%	20%
4B3	3.2	3.1	3.2	3.2	3.0	2.7	2.7	2.7	2.7	2.7	2.5	2.5	2.3	-28%	6%	22%
4B6	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	129%	1%	9%
4B8	2.5	2.9	3.3	2.7	2.7	2.9	2.5	2.3	2.1	2.2	2.1	2.0	1.8	-28%	5%	9%
4B9a	1.5	1.3	0.9	0.7	0.9	0.9	0.9	0.8	0.9	0.8	0.7	0.7	0.7	-55%	2%	9%
4B9d	2.8	2.6	2.5	2.1	2.5	2.7	2.6	2.3	2.5	2.2	2.1	2.0	1.9	-31%	5%	9%
4D1a	10.6	7.9	5.2	6.2	5.3	6.3	6.5	5.5	6.3	6.0	5.9	6.2	4.9	-53%	14%	15%
4F	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	-87%	0%	13%
6A	0.3	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	14%	1%	13%
6B	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-4%	1%	8%
6Cb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6%	0%	4%
6Cc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
6D	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5	183%	1%	15%
7A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-22%	0%	8%
Grand Total	45.5	42.8	40.9	40.7	40.5	40.4	40.4	38.8	39.7	39.3	38.5	38.0	35.9	-21%	100%	13%

**Table H.3:** Ammonia Emissions Inventory for Wales 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3160%	0%	6%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-99%	0%	1%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	50%
1A2fi	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	85%	0%	9%
1A2fii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1%	0%	6%
1A3bi	0.0	0.4	0.8	0.9	1.3	1.2	1.1	1.0	0.9	0.9	0.8	0.7	0.7	1767%	3%	6%
1A3bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	282%	0%	6%
1A3biii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2%	0%	4%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31%	0%	5%
1A4ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-86%	0%	0%
1A4bi	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	-52%	1%	16%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15%	0%	5%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-34%	0%	1%
1A4cii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-20%	0%	12%
1A5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78%	0%	1%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-79%	0%	9%
1B2aiv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-22%	0%	12%
2A7d	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3%	0%	8%
2B5a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53%	0%	1%
2C5e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2D1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-14%	0%	4%
2D2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
3D2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-2%	0%	5%
4B13	2.0	1.9	1.6	1.8	1.8	1.8	1.8	1.9	1.6	1.7	2.1	1.6	1.6	-21%	6%	9%
4B1a	9.4	8.8	8.6	8.8	8.5	8.8	8.8	8.9	9.1	9.0	9.4	8.5	8.4	-10%	31%	12%
4B1b	8.0	8.3	8.4	8.4	8.1	8.2	7.5	8.1	8.2	8.1	7.5	7.0	6.8	-15%	25%	11%
4B3	3.6	3.7	3.8	3.9	3.7	3.4	3.4	3.3	3.3	3.2	3.1	3.0	2.8	-21%	11%	26%
4B6	0.3	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	61%	2%	12%
4B8	0.6	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	-85%	0%	0%
4B9a	0.7	0.6	0.6	0.7	0.6	0.6	0.4	0.6	0.5	0.4	0.3	0.4	0.3	-53%	1%	4%
4B9d	1.4	1.2	1.7	2.0	1.8	1.7	1.0	1.6	1.4	1.1	0.9	1.1	1.0	-28%	4%	4%
4D1a	6.6	5.1	3.9	4.5	3.7	4.2	4.2	3.6	4.2	4.3	3.9	4.1	3.1	-53%	12%	10%
4F	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-87%	0%	2%
6A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	5%	1%	6%
6B	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-2%	1%	5%
6Cb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	383%	0%	12%
6Cc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
6D	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	186%	1%	10%
7A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-20%	0%	5%
Grand Total	34.1	32.3	31.5	33.1	31.5	31.8	30.3	31.1	31.0	30.4	30.1	28.3	26.7	-22%	100%	9%

**Table H.4:** Ammonia Emissions Inventory for Northern Ireland 1990-2008 (ktonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3160%	0%	2%
1A1c	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1A2a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1A2fi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	63%	0%	6%
1A2fii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6%	0%	3%
1A3bi	0.0	0.2	0.4	0.4	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	1431%	1%	3%
1A3bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	158%	0%	1%
1A3biii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	114%	0%	7%
1A3biv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32%	0%	2%
1A4ai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-99%	0%	0%
1A4bi	1.1	0.6	0.5	0.4	0.4	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	-88%	0%	7%
1A4bii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22%	0%	3%
1A4ci	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-36%	0%	1%
1A4cii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-18%	0%	11%
1A5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80%	0%	2%
1B1b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
1B2aiv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-22%	0%	1%
2A7d	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3%	0%	0%
2B5a	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%	0%
2C5e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
2D1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9%	0%	2%
2D2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
3D2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4%	0%	3%
4B13	0.7	0.7	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.5	0.6	0.5	-17%	2%	3%
4B1a	8.0	8.1	8.9	9.0	9.0	9.6	9.8	9.6	9.7	9.9	10.8	10.4	10.6	34%	34%	15%
4B1b	10.6	11.3	11.7	11.4	11.0	10.9	11.0	11.2	11.2	11.1	10.2	10.6	10.2	-3%	33%	17%
4B3	0.9	0.9	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	-31%	2%	6%
4B6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	53%	0%	3%
4B8	3.9	3.3	3.2	2.4	2.0	1.9	1.8	2.0	1.9	1.9	1.7	1.8	1.7	-56%	5%	9%
4B9a	1.1	1.4	1.0	1.0	0.9	0.8	1.0	1.0	1.0	1.0	1.0	0.9	0.8	-26%	3%	10%
4B9d	2.1	2.8	2.7	2.9	2.7	2.5	2.8	2.9	2.8	2.6	2.8	2.4	2.4	12%	8%	10%
4D1a	5.3	4.2	3.2	3.7	3.1	3.7	3.9	3.2	3.7	3.4	3.5	3.6	2.9	-45%	9%	9%
4F	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-87%	0%	2%
6A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	21%	0%	4%
6B	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	5%	1%	3%
6Cb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16%	0%	1%
6Cc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%	0%
6D	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	236%	1%	9%
7A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15%	0%	3%
Grand Total	34.3	34.2	33.8	33.5	31.9	32.5	33.1	32.7	32.7	32.3	32.5	32.1	31.1	-9%	100%	11%

**Table H.5:** Unallocated Ammonia Emissions in the UK, 1990-2008 (ktonnes)

This page intentionally left blank; there are no reported “Unallocated” (i.e. offshore) ammonia emission sources in the UK inventory.

## APPENDIX I: DEVOLVED ADMINISTRATION LEAD INVENTORIES, 1990-2008

**Table I.1** Lead Emissions Inventory for England 1990-2008 (tonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	0.115	0.106	0.018	0.014	0.013	0.011	0.010	0.010	0.010	0.010	0.009	0.002	0.002	-98%	5%	84%
1A1b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.001	0.001	180%	2%	59%
1A1c	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-95%	0%	99%
1A2a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-64%	0%	91%
1A2fi	0.020	0.020	0.017	0.015	0.015	0.015	0.015	0.015	0.015	0.012	0.004	0.004	0.004	-78%	9%	81%
1A2fii	0.012	0.007	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	-95%	1%	83%
1A3ai(i)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	85%	0%	94%
1A3aii(i)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	19%	0%	60%
1A3bi	1.636	0.816	0.451	0.239	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	-100%	2%	83%
1A3bii	0.152	0.059	0.027	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	83%
1A3biii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1%	1%	81%
1A3biv	0.017	0.006	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	87%
1A3c	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	35%	0%	80%
1A3dii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	71%	1%	69%
1A4ai	0.028	0.013	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	-97%	1%	84%
1A4bi	0.009	0.006	0.006	0.006	0.005	0.005	0.004	0.003	0.003	0.002	0.002	0.002	0.002	-76%	5%	56%
1A4bii	0.006	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	84%
1A4ci	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-76%	0%	64%
1A4cii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-29%	0%	59%
1A5b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-24%	0%	85%
1B1b	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	-16%	5%	92%
2A7a	0.001	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
2A7d	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	-81%	0%	89%
2B5a	0.093	0.080	0.085	0.026	0.011	0.013	0.010	0.013	0.014	0.013	0.004	0.003	0.003	-96%	7%	98%
2C1	0.044	0.045	0.041	0.037	0.035	0.034	0.029	0.031	0.023	0.027	0.026	0.026	0.024	-45%	48%	70%
2C3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.001	0.001	0.001	133%	1%	74%
2C5a	0.015	0.010	0.007	0.008	0.009	0.009	0.005	0.001	0.003	0.001	0.003	0.005	0.001	-92%	2%	90%
2C5b	0.006	0.006	0.006	0.005	0.005	0.008	0.009	0.006	0.003	0.001	0.001	0.002	0.001	-80%	2%	94%
2C5d	0.024	0.025	0.012	0.010	0.008	0.008	0.014	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
2C5e	0.060	0.039	0.019	0.012	0.008	0.007	0.007	0.007	0.006	0.006	0.005	0.004	0.004	-94%	7%	90%
6Ca	0.007	0.004	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
6Cb	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-99%	0%	95%
6Cc	0.222	0.062	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
Grand Total	2.48	1.31	0.71	0.40	0.12	0.12	0.11	0.09	0.09	0.08	0.06	0.05	0.05	-98%	100%	76%

**Table I.2** Lead Emissions Inventory for Scotland 1990-2008 (tonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	0.011	0.007	0.002	0.002	0.003	0.003	0.002	0.001	0.003	0.002	0.001	0.001	0.000	-97%	11%	10%
1A1b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-16%	8%	14%
1A1c	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
1A2a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
1A2fi	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.000	0.000	0.000	-77%	16%	8%
1A2fii	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-95%	2%	8%
1A3ai(i)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	108%	0%	4%
1A3aii(i)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	95%	0%	29%
1A3bi	0.158	0.079	0.043	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	3%	8%
1A3bii	0.015	0.006	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	1%	9%
1A3biii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4%	2%	9%
1A3biv	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	6%
1A3c	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8%	1%	10%
1A3dii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15%	4%	17%
1A4ai	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-94%	2%	8%
1A4bi	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	-72%	31%	20%
1A4bii	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	8%
1A4ci	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-73%	0%	14%
1A4cii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-27%	3%	18%
1A5b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-21%	1%	10%
1B1b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
2A7a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
2A7d	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-87%	1%	7%
2B5a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
2C1	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	1%	0%
2C3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133%	1%	3%
2C5a	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-93%	1%	3%
2C5b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-81%	2%	5%
2C5d	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
2C5e	0.005	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	-94%	10%	7%
6Ca	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
6Cb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-98%	0%	1%
6Cc	0.007	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
Grand Total	0.21	0.10	0.056	0.032	0.008	0.007	0.007	0.005	0.007	0.005	0.004	0.003	0.003	-99%	100%	4%

**Table I.3** Lead Emissions Inventory for Wales 1990-2008 (tonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	0.004	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	-97%	1%	4%
1A1b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	411%	3%	27%
1A1c	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-99%	0%	1%
1A2a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-93%	0%	9%
1A2fi	0.002	0.002	0.001	0.002	0.002	0.001	0.004	0.003	0.008	0.003	0.000	0.000	0.000	-80%	3%	6%
1A2fii	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-95%	0%	6%
1A3ai(i)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	248%	0%	1%
1A3aii(i)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	97%	0%	1%
1A3bi	0.101	0.050	0.028	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	5%
1A3bii	0.010	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	6%
1A3biii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-9%	0%	4%
1A3biv	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	5%
1A3c	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7%	0%	9%
1A3dii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	48%	1%	10%
1A4ai	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-88%	1%	8%
1A4bi	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.001	-69%	4%	13%
1A4bii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	5%
1A4ci	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-74%	0%	11%
1A4cii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-28%	0%	12%
1A5b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-45%	0%	3%
1B1b	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	-87%	2%	8%
2A7a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
2A7d	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	170%	0%	5%
2B5a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	-25%	1%	2%
2C1	0.012	0.014	0.016	0.015	0.015	0.010	0.006	0.010	0.014	0.015	0.011	0.010	0.010	-13%	81%	29%
2C3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133%	1%	23%
2C5a	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-77%	1%	6%
2C5b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-87%	0%	1%
2C5d	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
2C5e	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-94%	1%	3%
6Ca	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
6Cb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-97%	0%	4%
6Cc	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
Grand Total	0.137	0.078	0.052	0.037	0.023	0.016	0.013	0.017	0.024	0.021	0.014	0.013	0.013	-91%	100%	19%

**Table I.4** Lead Emissions Inventory for Northern Ireland 1990-2008 (tonnes)

NFR Code	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change (1990-2008)	% of DA Total (2008)	% of UK Sector (2008)
1A1a	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-98%	7%	2%
1A1b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
1A1c	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
1A2a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
1A2fi	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	-63%	28%	5%
1A2fii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-95%	2%	3%
1A3ai(i)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	509%	0%	1%
1A3aii(i)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	75%	0%	10%
1A3bi	0.055	0.026	0.013	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	4%	4%
1A3bii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-98%	1%	2%
1A3biii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	84%	3%	6%
1A3biv	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	2%
1A3c	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	62%	0%	2%
1A3dii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	76%	3%	4%
1A4ai	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-99%	0%	1%
1A4bi	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	-87%	43%	10%
1A4bii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	3%
1A4ci	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-76%	0%	10%
1A4cii	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-26%	4%	11%
1A5b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-21%	0%	2%
1B1b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
2A7a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
2A7d	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-99%	0%	0%
2B5a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
2C1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
2C3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	133%	0%	0%
2C5a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-86%	2%	1%
2C5b	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-82%	1%	1%
2C5d	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
2C5e	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-94%	1%	0%
6Ca	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-100%	0%	0%
6Cb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-98%	0%	0%
6Cc	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0%	0%	0%
Grand Total	0.064	0.031	0.017	0.010	0.002	0.002	0.002	0.001	0.001	0.002	0.001	0.001	0.001	-98%	100%	1%

**Table I.5:** Unallocated Lead Emissions in the UK, 1990-2008 (tonnes)

This page intentionally left blank; there are no reported “Unallocated” (i.e. offshore) lead emission sources in the UK inventory.