

24.4 Appendix 4: Removals and Emissions by post-1990 afforestation and deforestation in the UK

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- The following notes apply to all Tables
 - Low, Mid, High refer to Emissions Scenarios;
 - Low means more forestry - proportion of UK planting of 30,000 ha/year distributed by conifer & broadleaf to the four individual countries by proportions in 2002.
 - Mid means policy based or business as usual forestry proportion of UK planting of that occurred in 2004 distributed across England, Scotland, Wales and N. Ireland
 - High means less forestry - 0 kha/year conifer, 0 kha/year broadleaf
 - These data include, biomass, litter, soils and products.
 - Products are small in the time period covered
 - Units are Gg CO₂ per year
 - Projected deforestation follows 10 term autoregressive model fitted to 1990 - 2003 for short term variation: unadjusted for Mid scenario but with upward long term trend for High scenario and downward long term trend for Low scenario.

Table A4. 1: Removals and emissions of atmospheric carbon by post-1990 afforestation and deforestation—United Kingdom A: Mid emissions scenario, B: Low emission scenario, C: High emission scenario

A (Mid) UK	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Gg CO ₂ /year or GWP equiv Gg CO ₂ /year	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO ₂	Immediate loss (Biomass) CH ₄	Immediate loss (Biomass) N ₂ O	Delayed loss (Soil) CO ₂
1990	28.4	0.0	135.7	12.4	1.3	17.5	195.2
1991	176.5	0.0	128.0	11.7	1.2	33.9	351.4
1992	208.2	0.0	121.7	11.2	1.1	49.4	391.6
1993	125.4	0.0	108.3	9.9	1.0	64.0	308.6
1994	-44.4	0.0	111.2	10.2	1.0	77.7	155.8
1995	-277.8	0.0	102.9	9.4	1.0	90.7	-73.8
1996	-522.5	0.0	119.4	10.9	1.1	102.9	-288.2
1997	-784.1	0.0	124.8	11.4	1.2	114.4	-532.3
1998	-1013.8	0.0	124.8	11.4	1.2	125.3	-751.0
1999	-1227.2	0.0	177.6	16.3	1.7	135.6	-896.1
2000	-1421.8	0.0	224.1	20.5	2.1	145.3	-1029.8
2001	-1586.3	0.0	269.1	24.7	2.5	154.4	-1135.6
2002	-1751.5	0.0	230.6	21.1	2.1	163.1	-1334.6
2003	-1953.7	0.0	222.8	20.4	2.1	171.3	-1537.1
2004	-2148.3	0.0	213.7	19.6	2.0	179.0	-1734.0
2005	-2332.2	0.0	212.0	19.4	2.0	186.3	-1912.6
2006	-2501.3	0.0	191.2	17.5	1.8	193.2	-2097.6
2007	-2650.0	0.0	179.5	16.4	1.7	199.8	-2252.6
2008	-2793.0	0.0	170.8	15.7	1.6	206.0	-2398.9
2009	-2929.3	0.0	164.9	15.1	1.5	211.8	-2535.8
2010	-3107.4	0.0	172.8	15.8	1.6	217.4	-2699.7
2011	-3280.1	0.0	168.6	15.4	1.6	222.6	-2871.9
2012	-3449.3	0.0	162.7	14.9	1.5	227.6	-3042.5
2013	-3579.1	-21.4	150.6	13.8	1.4	232.3	-3181.0
2014	-3739.9	-6.5	153.2	14.0	1.4	236.8	-3334.4
2015	-3575.7	-209.5	153.1	14.0	1.4	241.1	-3166.0
2016	-3823.2	-94.3	145.9	13.4	1.4	245.1	-3417.5
2017	-4073.5	-24.9	137.4	12.6	1.3	248.9	-3673.3
2018	-4297.8	-0.6	135.0	12.4	1.3	252.5	-3896.6
2019	-4573.1	39.6	134.9	12.4	1.3	256.0	-4168.6
2020	-4284.4	-255.3	130.6	12.0	1.2	259.3	-3881.4

B (Low) UK	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Gg CO₂/year or GWP equiv Gg CO₂/year	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO₂	Immediate loss (Biomass) CH₄	Immediate loss (Biomass) N₂O	Delayed loss (Soil) CO₂
2005	-2332.2	0.0	212.0	19.4	2.0	186.3	-1912.6
2006	-2467.6	0.0	188.6	17.3	1.8	193.2	-2066.8
2007	-2496.8	0.0	171.6	15.7	1.6	199.8	-2108.2
2008	-2609.4	0.0	154.8	14.2	1.4	206.0	-2232.9
2009	-2810.7	0.0	140.1	12.8	1.3	211.8	-2444.6
2010	-3144.8	0.0	138.2	12.7	1.3	217.4	-2775.3
2011	-3537.7	0.0	124.0	11.4	1.2	222.6	-3178.5
2012	-3953.2	0.0	108.2	9.9	1.0	227.6	-3606.5
2013	-4328.3	-21.4	85.9	7.9	0.8	232.3	-4001.3
2014	-4721.3	-6.5	78.4	7.2	0.7	236.8	-4398.1
2015	-4774.1	-209.5	68.9	6.3	0.6	241.1	-4457.2
2016	-5225.1	-94.3	55.0	5.0	0.5	245.1	-4919.5
2017	-5668.4	-24.9	39.2	3.6	0.4	248.9	-5376.3
2018	-6078.3	-0.6	36.9	3.4	0.3	252.5	-5785.1
2019	-6534.8	39.6	32.6	3.0	0.3	256.0	-6242.9
2020	-6425.4	-255.3	27.1	2.5	0.3	259.3	-6136.4

C (High) UK	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO ₂	Immediate loss (Biomass) CH ₄	Immediate loss (Biomass) N ₂ O	Delayed loss (Soil) CO ₂	Afforestation + Deforestation
2005	-2332.2	0.0	212.0	19.4	2.0	186.3	-1912.6
2006	-2521.7	0.0	193.8	17.8	1.8	193.2	-2115.1
2007	-2742.3	0.0	187.4	17.2	1.7	199.8	-2336.2
2008	-2903.6	0.0	186.8	17.1	1.7	206.0	-2492.0
2009	-3000.7	0.0	189.8	17.4	1.8	211.8	-2579.9
2010	-3084.8	0.0	207.5	19.0	1.9	217.4	-2639.0
2011	-3124.9	0.0	213.1	19.5	2.0	222.6	-2667.6
2012	-3145.5	0.0	217.2	19.9	2.0	227.6	-2678.7
2013	-3127.5	-21.4	215.2	19.7	2.0	232.3	-2658.2
2014	-3148.2	-6.5	228.0	20.9	2.1	236.8	-2660.4
2015	-2853.1	-209.5	238.1	21.8	2.2	241.1	-2349.9
2016	-2978.0	-94.3	241.2	22.1	2.2	245.1	-2467.4
2017	-3111.9	-24.9	243.0	22.3	2.3	248.9	-2595.4
2018	-3224.3	-0.6	250.9	23.0	2.3	252.5	-2695.5
2019	-3390.4	39.6	261.2	23.9	2.4	256.0	-2846.9
2020	-2993.6	-255.3	267.3	24.5	2.5	259.3	-2440.1

Table A4. 2: Removals and emissions of atmospheric carbon by post-1990 afforestation and deforestation – England A: Mid emissions scenario, B: Low emission scenario, C: High emission scenario

A (Mid) England	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Gg CO ₂ /year or GWP equiv Gg CO ₂ /year	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO ₂	Immediate loss (Biomass) CH ₄	Immediate loss (Biomass) N ₂ O	Delayed loss (Soil) CO ₂
1990	-3.3	0.0	97.4	8.9	0.9	12.5	116.5
1991	2.9	0.0	92.0	8.4	0.9	24.4	128.5
1992	-2.4	0.0	87.4	8.0	0.8	35.5	129.3
1993	-28.6	0.0	77.8	7.1	0.7	46.0	103.0
1994	-69.2	0.0	79.9	7.3	0.7	55.8	74.6
1995	-123.7	0.0	73.9	6.8	0.7	65.1	22.9
1996	-194.6	0.0	85.7	7.9	0.8	73.9	-26.3
1997	-271.1	0.0	89.6	8.2	0.8	82.2	-90.3
1998	-344.2	0.0	89.7	8.2	0.8	90.0	-155.5
1999	-410.8	0.0	127.6	11.7	1.2	97.4	-173.0
2000	-465.3	0.0	160.9	14.7	1.5	104.3	-183.8
2001	-512.7	0.0	193.2	17.7	1.8	110.9	-189.1
2002	-560.3	0.0	165.6	15.2	1.5	117.1	-260.9
2003	-612.4	0.0	160.0	14.7	1.5	123.0	-313.2
2004	-664.2	0.0	153.5	14.1	1.4	128.6	-366.7
2005	-721.5	0.0	152.2	14.0	1.4	133.8	-420.1
2006	-772.9	0.0	137.3	12.6	1.3	138.8	-483.0
2007	-821.9	0.0	128.9	11.8	1.2	143.5	-536.5
2008	-869.4	0.0	122.7	11.2	1.1	147.9	-586.4
2009	-917.0	0.0	118.5	10.9	1.1	152.1	-634.5
2010	-969.2	0.0	124.1	11.4	1.2	156.1	-676.4
2011	-1023.3	0.0	121.1	11.1	1.1	159.9	-730.1
2012	-1078.7	0.0	116.9	10.7	1.1	163.5	-786.6
2013	-1136.7	0.0	108.1	9.9	1.0	166.9	-850.8
2014	-1189.3	0.0	110.0	10.1	1.0	170.1	-898.1
2015	-1229.9	-13.8	110.0	10.1	1.0	173.1	-935.7
2016	-1300.0	-7.6	104.8	9.6	1.0	176.0	-1008.7
2017	-1372.5	-1.2	98.7	9.0	0.9	178.8	-1085.1
2018	-1436.2	-3.2	97.0	8.9	0.9	181.4	-1148.1
2019	-1520.7	2.7	96.9	8.9	0.9	183.8	-1230.3
2020	-1539.4	-28.6	93.8	8.6	0.9	186.2	-1250.0

B (Low) England	Afforestation		Deforestation				Art 3.3 (excludes HWP)
Gg CO₂/year or GWP equiv Gg CO₂/year	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO₂	Immediate loss (Biomass) CH₄	Immediate loss (Biomass) N₂O	Delayed loss (Soil) CO₂	Afforestation + Deforestation
2005	-721.5	0.0	152.2	14.0	1.4	133.8	-420.1
2006	-775.2	0.0	135.4	12.4	1.3	138.8	-487.4
2007	-806.2	0.0	123.2	11.3	1.1	143.5	-527.1
2008	-867.2	0.0	111.2	10.2	1.0	147.9	-596.8
2009	-963.6	0.0	100.6	9.2	0.9	152.1	-700.7
2010	-1098.8	0.0	99.3	9.1	0.9	156.1	-833.4
2011	-1259.7	0.0	89.1	8.2	0.8	159.9	-1001.7
2012	-1430.4	0.0	77.7	7.1	0.7	163.5	-1181.4
2013	-1601.2	0.0	61.7	5.7	0.6	166.9	-1366.4
2014	-1759.5	0.0	56.3	5.2	0.5	170.1	-1527.5
2015	-1898.1	-13.8	49.5	4.5	0.5	173.1	-1670.5
2016	-2059.4	-7.6	39.5	3.6	0.4	176.0	-1839.9
2017	-2217.5	-1.2	28.2	2.6	0.3	178.8	-2007.7
2018	-2362.8	-3.2	26.5	2.4	0.2	181.4	-2152.3
2019	-2526.3	2.7	23.4	2.1	0.2	183.8	-2316.7
2020	-2622.3	-28.6	19.4	1.8	0.2	186.2	-2414.6

C (High) England	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO₂	Immediate loss (Biomass) CH₄	Immediate loss (Biomass) N₂O	Delayed loss (Soil) CO₂	Afforestation + Deforestation
2005	-721.5	0.0	152.2	14.0	1.4	133.8	-420.1
2006	-771.5	0.0	139.2	12.8	1.3	138.8	-479.5
2007	-831.4	0.0	134.6	12.3	1.3	143.5	-539.7
2008	-870.7	0.0	134.1	12.3	1.2	147.9	-575.1
2009	-889.0	0.0	136.3	12.5	1.3	152.1	-586.7
2010	-891.0	0.0	149.0	13.7	1.4	156.1	-570.9
2011	-880.7	0.0	153.0	14.0	1.4	159.9	-552.4
2012	-866.7	0.0	156.0	14.3	1.5	163.5	-531.4
2013	-856.6	0.0	154.5	14.2	1.4	166.9	-519.6
2014	-845.4	0.0	163.7	15.0	1.5	170.1	-495.1
2015	-827.0	-13.8	171.0	15.7	1.6	173.1	-465.6
2016	-842.2	-7.6	173.2	15.9	1.6	176.0	-475.5
2017	-863.1	-1.2	174.5	16.0	1.6	178.8	-492.2
2018	-877.5	-3.2	180.2	16.5	1.7	181.4	-497.7
2019	-914.5	2.7	187.6	17.2	1.7	183.8	-524.2
2020	-886.6	-28.6	192.0	17.6	1.8	186.2	-489.1

Table A4. 3: Removals and emissions of atmospheric carbon by post-1990 afforestation and deforestation—Scotland A: Mid emissions scenario, B: Low emission scenario, C: High emission scenario

A (Mid) Scotland	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Gg CO ₂ /year or GWP equiv Gg CO ₂ /year	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO ₂	Immediate loss (Biomass) CH ₄	Immediate loss (Biomass) N ₂ O	Delayed loss (Soil) CO ₂
1990	30.8	0.0	30.5	2.8	0.3	3.9	68.3
1991	159.1	0.0	28.8	2.6	0.3	7.6	198.4
1992	196.9	0.0	27.4	2.5	0.3	11.1	238.2
1993	152.4	0.0	24.4	2.2	0.2	14.4	193.6
1994	38.3	0.0	25.0	2.3	0.2	17.5	83.3
1995	-120.4	0.0	23.2	2.1	0.2	20.4	-74.5
1996	-268.5	0.0	26.9	2.5	0.2	23.2	-215.8
1997	-429.9	0.0	28.1	2.6	0.3	25.7	-373.2
1998	-563.4	0.0	28.1	2.6	0.3	28.2	-504.3
1999	-690.4	0.0	40.0	3.7	0.4	30.5	-615.9
2000	-814.8	0.0	50.4	4.6	0.5	32.7	-726.6
2001	-919.5	0.0	60.5	5.5	0.6	34.7	-818.1
2002	-1022.7	0.0	51.9	4.8	0.5	36.7	-928.9
2003	-1158.1	0.0	50.1	4.6	0.5	38.5	-1064.4
2004	-1286.4	0.0	48.1	4.4	0.4	40.3	-1193.1
2005	-1399.3	0.0	47.7	4.4	0.4	41.9	-1304.9
2006	-1503.8	0.0	43.0	3.9	0.4	43.5	-1412.9
2007	-1591.6	0.0	40.4	3.7	0.4	45.0	-1502.2
2008	-1671.0	0.0	38.4	3.5	0.4	46.3	-1582.3
2009	-1745.3	0.0	37.1	3.4	0.3	47.7	-1656.7
2010	-1857.1	0.0	38.9	3.6	0.4	48.9	-1765.3
2011	-1960.7	0.0	37.9	3.5	0.4	50.1	-1868.8
2012	-2060.3	0.0	36.6	3.4	0.3	51.2	-1968.8
2013	-2155.8	0.0	33.9	3.1	0.3	52.3	-2066.2
2014	-2240.0	0.0	34.5	3.2	0.3	53.3	-2148.8
2015	-2021.1	-190.6	34.5	3.2	0.3	54.2	-1928.9
2016	-2190.2	-79.2	32.8	3.0	0.3	55.1	-2098.9
2017	-2344.8	-23.8	30.9	2.8	0.3	56.0	-2254.7
2018	-2514.1	16.1	30.4	2.8	0.3	56.8	-2423.8
2019	-2684.3	42.3	30.3	2.8	0.3	57.6	-2593.3
2020	-2363.1	-222.1	29.4	2.7	0.3	58.3	-2272.4

B (Low) Scotland	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Gg CO₂/year or GWP equiv Gg CO₂/year	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO₂	Immediate loss (Biomass) CH₄	Immediate loss (Biomass) N₂O	Delayed loss (Soil) CO₂
2005	-1399.3	0.0	47.7	4.4	0.4	41.9	-1304.9
2006	-1470.0	0.0	42.4	3.9	0.4	43.5	-1379.8
2007	-1464.6	0.0	38.6	3.5	0.4	45.0	-1377.2
2008	-1501.6	0.0	34.8	3.2	0.3	46.3	-1416.9
2009	-1586.2	0.0	31.5	2.9	0.3	47.7	-1503.8
2010	-1758.0	0.0	31.1	2.8	0.3	48.9	-1674.9
2011	-1957.0	0.0	27.9	2.6	0.3	50.1	-1876.2
2012	-2167.9	0.0	24.3	2.2	0.2	51.2	-2089.9
2013	-2376.1	0.0	19.3	1.8	0.2	52.3	-2302.5
2014	-2568.2	0.0	17.6	1.6	0.2	53.3	-2495.5
2015	-2451.0	-190.6	15.5	1.4	0.1	54.2	-2379.7
2016	-2716.3	-79.2	12.4	1.1	0.1	55.1	-2647.5
2017	-2962.8	-23.8	8.8	0.8	0.1	56.0	-2897.1
2018	-3221.3	16.1	8.3	0.8	0.1	56.8	-3155.4
2019	-3479.6	42.3	7.3	0.7	0.1	57.6	-3413.9
2020	-3246.3	-222.1	6.1	0.6	0.1	58.3	-3181.2

C (High) Scotland	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Gg CO₂/year or GWP equiv Gg CO₂/year	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO₂	Immediate loss (Biomass) CH₄	Immediate loss (Biomass) N₂O	Delayed loss (Soil) CO₂
2005	-1399.3	0.0	47.7	4.4	0.4	41.9	-1304.9
2006	-1524.1	0.0	43.6	4.0	0.4	43.5	-1432.7
2007	-1668.2	0.0	42.2	3.9	0.4	45.0	-1576.8
2008	-1773.1	0.0	42.0	3.9	0.4	46.3	-1680.5
2009	-1841.2	0.0	42.7	3.9	0.4	47.7	-1746.5
2010	-1916.8	0.0	46.7	4.3	0.4	48.9	-1816.5
2011	-1962.9	0.0	47.9	4.4	0.4	50.1	-1860.0
2012	-1995.5	0.0	48.9	4.5	0.5	51.2	-1890.4
2013	-2023.0	0.0	48.4	4.4	0.5	52.3	-1917.4
2014	-2042.2	0.0	51.3	4.7	0.5	53.3	-1932.4
2015	-1761.9	-190.6	53.6	4.9	0.5	54.2	-1648.7
2016	-1873.0	-79.2	54.3	5.0	0.5	55.1	-1758.1
2017	-1972.2	-23.8	54.7	5.0	0.5	56.0	-1856.0
2018	-2087.6	16.1	56.5	5.2	0.5	56.8	-1968.6
2019	-2204.9	42.3	58.8	5.4	0.5	57.6	-2082.6
2020	-1830.6	-222.1	60.1	5.5	0.6	58.3	-1706.1

Table A4. 4: Removals and emissions of atmospheric carbon by post-1990 afforestation and deforestation–
Wales A: Mid emissions scenario, B: Low emission scenario, C: High emission scenario

A (Mid) Wales	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Gg CO ₂ /year or GWP equiv Gg CO ₂ /year	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO ₂	Immediate loss (Biomass) CH ₄	Immediate loss (Biomass) N ₂ O	Delayed loss (Soil) CO ₂
1990	-1.3	0.0	7.7	0.7	0.1	1.0	8.2
1991	-0.3	0.0	7.3	0.7	0.1	1.9	9.6
1992	-2.0	0.0	6.9	0.6	0.1	2.8	8.4
1993	-6.0	0.0	6.2	0.6	0.1	3.6	4.4
1994	-12.0	0.0	6.3	0.6	0.1	4.4	-0.6
1995	-18.3	0.0	5.8	0.5	0.1	5.2	-6.7
1996	-25.4	0.0	6.8	0.6	0.1	5.8	-12.1
1997	-32.9	0.0	7.1	0.6	0.1	6.5	-18.6
1998	-40.2	0.0	7.1	0.6	0.1	7.1	-25.2
1999	-46.5	0.0	10.1	0.9	0.1	7.7	-27.7
2000	-52.0	0.0	12.7	1.2	0.1	8.3	-29.8
2001	-57.0	0.0	15.3	1.4	0.1	8.8	-31.4
2002	-63.5	0.0	13.1	1.2	0.1	9.3	-39.8
2003	-70.5	0.0	12.7	1.2	0.1	9.7	-46.8
2004	-76.3	0.0	12.1	1.1	0.1	10.2	-52.7
2005	-80.4	0.0	12.0	1.1	0.1	10.6	-56.5
<i>2006</i>	<i>-83.7</i>	<i>0.0</i>	<i>10.9</i>	<i>1.0</i>	<i>0.1</i>	<i>11.0</i>	<i>-60.7</i>
<i>2007</i>	<i>-87.2</i>	<i>0.0</i>	<i>10.2</i>	<i>0.9</i>	<i>0.1</i>	<i>11.3</i>	<i>-64.7</i>
2008	-91.7	0.0	9.7	0.9	0.1	11.7	-69.3
2009	-97.2	0.0	9.4	0.9	0.1	12.0	-74.8
2010	-104.5	0.0	9.8	0.9	0.1	12.3	-81.3
2011	-111.6	0.0	9.6	0.9	0.1	12.6	-88.4
2012	-118.5	0.0	9.2	0.8	0.1	12.9	-95.4
<i>2013</i>	<i>-125.2</i>	<i>0.0</i>	<i>8.6</i>	<i>0.8</i>	<i>0.1</i>	<i>13.2</i>	<i>-102.6</i>
<i>2014</i>	<i>-131.5</i>	<i>0.0</i>	<i>8.7</i>	<i>0.8</i>	<i>0.1</i>	<i>13.5</i>	<i>-108.4</i>
2015	-128.6	-6.0	8.7	0.8	0.1	13.7	-105.3
<i>2016</i>	<i>-139.6</i>	<i>-1.6</i>	<i>8.3</i>	<i>0.8</i>	<i>0.1</i>	<i>13.9</i>	<i>-116.6</i>
<i>2017</i>	<i>-150.0</i>	<i>0.7</i>	<i>7.8</i>	<i>0.7</i>	<i>0.1</i>	<i>14.1</i>	<i>-127.3</i>
<i>2018</i>	<i>-160.3</i>	<i>1.9</i>	<i>7.7</i>	<i>0.7</i>	<i>0.1</i>	<i>14.3</i>	<i>-137.5</i>
<i>2019</i>	<i>-168.1</i>	<i>0.8</i>	<i>7.7</i>	<i>0.7</i>	<i>0.1</i>	<i>14.5</i>	<i>-145.1</i>
2020	-164.1	-6.6	7.4	0.7	0.1	14.7	-141.2

B (Low) Wales	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Gg CO₂ /year or GWP equiv Gg CO₂/year	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO₂	Immediate loss (Biomass) CH₄	Immediate loss (Biomass) N₂O	Delayed loss (Soil) CO₂
2005	-80.4	0.0	12.0	1.1	0.1	10.6	-56.5
2006	-83.9	0.0	10.7	1.0	0.1	11.0	-61.1
2007	-85.4	0.0	9.7	0.9	0.1	11.3	-63.3
2008	-91.4	0.0	8.8	0.8	0.1	11.7	-70.0
2009	-102.3	0.0	8.0	0.7	0.1	12.0	-81.5
2010	-119.0	0.0	7.9	0.7	0.1	12.3	-98.0
2011	-138.2	0.0	7.0	0.6	0.1	12.6	-117.8
2012	-158.2	0.0	6.1	0.6	0.1	12.9	-138.5
2013	-177.6	0.0	4.9	0.4	0.0	13.2	-159.1
2014	-195.9	0.0	4.5	0.4	0.0	13.5	-177.5
2015	-204.0	-6.0	3.9	0.4	0.0	13.7	-186.0
2016	-225.4	-1.6	3.1	0.3	0.0	13.9	-208.1
2017	-245.5	0.7	2.2	0.2	0.0	14.1	-228.9
2018	-265.0	1.9	2.1	0.2	0.0	14.3	-248.3
2019	-281.7	0.8	1.9	0.2	0.0	14.5	-265.1
2020	-286.5	-6.6	1.5	0.1	0.0	14.7	-270.1

C (High) Wales	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO₂	Immediate loss (Biomass) CH₄	Immediate loss (Biomass) N₂O	Delayed loss (Soil) CO₂	Afforestation + Deforestation
2005	-80.4	0.0	12.0	1.1	0.1	10.6	-56.5
2006	-83.5	0.0	11.0	1.0	0.1	11.0	-60.4
2007	-88.3	0.0	10.6	1.0	0.1	11.3	-65.3
2008	-91.9	0.0	10.6	1.0	0.1	11.7	-68.6
2009	-94.1	0.0	10.8	1.0	0.1	12.0	-70.2
2010	-95.7	0.0	11.8	1.1	0.1	12.3	-70.4
2011	-95.6	0.0	12.1	1.1	0.1	12.6	-69.6
2012	-94.6	0.0	12.3	1.1	0.1	12.9	-68.1
2013	-93.6	0.0	12.2	1.1	0.1	13.2	-67.0
2014	-92.7	0.0	13.0	1.2	0.1	13.5	-64.9
2015	-83.1	-6.0	13.5	1.2	0.1	13.7	-54.5
2016	-87.9	-1.6	13.7	1.3	0.1	13.9	-58.9
2017	-92.4	0.7	13.8	1.3	0.1	14.1	-63.1
2018	-97.1	1.9	14.3	1.3	0.1	14.3	-67.1
2019	-99.6	0.8	14.8	1.4	0.1	14.5	-68.7
2020	-90.4	-6.6	15.2	1.4	0.1	14.7	-58.9

Table A4. 5: Removals and emissions of atmospheric carbon by post-1990 afforestation and deforestation– N. Ireland A: Mid emissions scenario, B: Low emission scenario, C: High emission scenario

A (Mid) N. Ireland	Afforestation		Deforestation				Art 3.3 (excludes HWP)	
	Gg CO ₂ /year or GWP equiv Gg CO ₂ /year	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO ₂	Immediate loss (Biomass) CH ₄	Immediate loss (Biomass) N ₂ O	Delayed loss (Soil) CO ₂	Afforestation + Deforestation
1990	2.2	0.0	0.0	0.0	0.0	0.0	0.0	2.2
1991	14.9	0.0	0.0	0.0	0.0	0.0	0.0	14.9
1992	15.7	0.0	0.0	0.0	0.0	0.0	0.0	15.7
1993	7.6	0.0	0.0	0.0	0.0	0.0	0.0	7.6
1994	-1.5	0.0	0.0	0.0	0.0	0.0	0.0	-1.5
1995	-15.5	0.0	0.0	0.0	0.0	0.0	0.0	-15.5
1996	-34.0	0.0	0.0	0.0	0.0	0.0	0.0	-34.0
1997	-50.2	0.0	0.0	0.0	0.0	0.0	0.0	-50.2
1998	-66.0	0.0	0.0	0.0	0.0	0.0	0.0	-66.0
1999	-79.6	0.0	0.0	0.0	0.0	0.0	0.0	-79.6
2000	-89.6	0.0	0.0	0.0	0.0	0.0	0.0	-89.6
2001	-97.1	0.0	0.0	0.0	0.0	0.0	0.0	-97.1
2002	-105.0	0.0	0.0	0.0	0.0	0.0	0.0	-105.0
2003	-112.7	0.0	0.0	0.0	0.0	0.0	0.0	-112.7
2004	-121.5	0.0	0.0	0.0	0.0	0.0	0.0	-121.5
2005	-131.0	0.0	0.0	0.0	0.0	0.0	0.0	-131.0
2006	-141.0	0.0	0.0	0.0	0.0	0.0	0.0	-141.0
2007	-149.3	0.0	0.0	0.0	0.0	0.0	0.0	-149.3
2008	-160.8	0.0	0.0	0.0	0.0	0.0	0.0	-160.8
2009	-169.8	0.0	0.0	0.0	0.0	0.0	0.0	-169.8
2010	-176.7	0.0	0.0	0.0	0.0	0.0	0.0	-176.7
2011	-184.6	0.0	0.0	0.0	0.0	0.0	0.0	-184.6
2012	-191.7	0.0	0.0	0.0	0.0	0.0	0.0	-191.7
2013	-161.4	-21.4	0.0	0.0	0.0	0.0	0.0	-161.4
2014	-179.1	-6.5	0.0	0.0	0.0	0.0	0.0	-179.1
2015	-196.1	0.9	0.0	0.0	0.0	0.0	0.0	-196.1
2016	-193.3	-5.9	0.0	0.0	0.0	0.0	0.0	-193.3
2017	-206.1	-0.6	0.0	0.0	0.0	0.0	0.0	-206.1
2018	-187.3	-15.3	0.0	0.0	0.0	0.0	0.0	-187.3
2019	-199.9	-6.2	0.0	0.0	0.0	0.0	0.0	-199.9
2020	-217.7	1.9	0.0	0.0	0.0	0.0	0.0	-217.7

B (Low) N. Ireland	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Gg CO₂ /year or GWP equiv Gg CO₂/year	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO₂	Immediate loss (Biomass) CH₄	Immediate loss (Biomass) N₂O	Delayed loss (Soil) CO₂
2005	-131.0	0.0	0.0	0.0	0.0	0.0	-131.0
2006	-138.5	0.0	0.0	0.0	0.0	0.0	-138.5
2007	-140.6	0.0	0.0	0.0	0.0	0.0	-140.6
2008	-149.3	0.0	0.0	0.0	0.0	0.0	-149.3
2009	-158.6	0.0	0.0	0.0	0.0	0.0	-158.6
2010	-169.0	0.0	0.0	0.0	0.0	0.0	-169.0
2011	-182.7	0.0	0.0	0.0	0.0	0.0	-182.7
2012	-196.7	0.0	0.0	0.0	0.0	0.0	-196.7
2013	-173.3	-21.4	0.0	0.0	0.0	0.0	-173.3
2014	-197.6	-6.5	0.0	0.0	0.0	0.0	-197.6
2015	-220.9	0.9	0.0	0.0	0.0	0.0	-220.9
2016	-224.1	-5.9	0.0	0.0	0.0	0.0	-224.1
2017	-242.6	-0.6	0.0	0.0	0.0	0.0	-242.6
2018	-229.2	-15.3	0.0	0.0	0.0	0.0	-229.2
2019	-247.2	-6.2	0.0	0.0	0.0	0.0	-247.2
2020	-270.4	1.9	0.0	0.0	0.0	0.0	-270.4

C (High) N. Ireland	Afforestation		Deforestation				Art 3.3 (excludes HWP)
	Biomass stocks	Harvested Wood Products	Immediate loss (Biomass) CO₂	Immediate loss (Biomass) CH₄	Immediate loss (Biomass) N₂O	Delayed loss (Soil) CO₂	Afforestation + Deforestation
2005	-131.0	0.0	0.0	0.0	0.0	0.0	-131.0
2006	-142.4	0.0	0.0	0.0	0.0	0.0	-142.4
2007	-154.5	0.0	0.0	0.0	0.0	0.0	-154.5
2008	-167.8	0.0	0.0	0.0	0.0	0.0	-167.8
2009	-176.5	0.0	0.0	0.0	0.0	0.0	-176.5
2010	-181.3	0.0	0.0	0.0	0.0	0.0	-181.3
2011	-185.7	0.0	0.0	0.0	0.0	0.0	-185.7
2012	-188.7	0.0	0.0	0.0	0.0	0.0	-188.7
2013	-154.2	-21.4	0.0	0.0	0.0	0.0	-154.2
2014	-167.9	-6.5	0.0	0.0	0.0	0.0	-167.9
2015	-181.2	0.9	0.0	0.0	0.0	0.0	-181.2
2016	-174.8	-5.9	0.0	0.0	0.0	0.0	-174.8
2017	-184.2	-0.6	0.0	0.0	0.0	0.0	-184.2
2018	-162.0	-15.3	0.0	0.0	0.0	0.0	-162.0
2019	-171.4	-6.2	0.0	0.0	0.0	0.0	-171.4
2020	-186.0	1.9	0.0	0.0	0.0	0.0	-186.0