The following supplement accompanies the article

Embodied water imports to the UK under climate change

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Supplement. Additional data

Table S1. Rice: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk								
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/ tonne)	Total water consumption (m3)	Higher min temps harms yield	Crop vulnerability to hot spells	Risk of drought results in reduced	Flood risk to crops	changing melt patterns	Reduced water availability from	Storm risk to crops	Salt water intrusion risk to crops	CO2 fertilisation
Europe & Med													
Spain	63,749,497	103,255	1143	118,020,465	C3	C3	A3	A3			A3	B2	C2
Italy	66,793,517	69,609	1030	71,697,270									
NL	23,785,579	28,274	1135	32,090,990			B3						
Belgium	13,683,053	17,507	952	16,666,664									
North America													
USA	36,802,018	57,254	1331	76,205,074	C3	C3	A3	A3			A3	B2	C2
East Asia													
China	189,006	108	1072	115,776	C3	C3	A3	A3	A3		A3	B2	C2
Southeast Asia													
Thailand	52,458,170	60,852	4047	246,268,044	C3	C3	A3	A3			A3	B2	C2
Vietnam	91,917	96	2163	207,648			A3	A3			A3		
Central & S. America													
Uruguay	7,263,101	13,679	1323	18,097,317	C3	C3	A3	A3	A3		A3	B2	C2
Argentina	118,505	175	1636	286,300			B2						
South Asia													
India	131,730,471	123,473	3350	413,634,550	C3	C3	A3	A3	A3		A3	B2	C2
Pakistan	74,493,884	88,403	3677	325,057,831									
Total for selected countries	**471,158,718**	**562,685**		**1,318,347,929**									

Table S2. Wheat: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk											
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	Reduced frost risk to crop	Northwards expansion of crops	Crops already at climate thresholds likely to be vulnerable	Greater risk of pests spreading Northward	Crop vulnerability to more frequent hot spells	Water stress from reduced summer rain reduces crop yield	Flood risk to crops	Storm risk to crops	Salt water intrusion risk to crops	CO2 fertilisation	Possibility of increased drought risk	Possibility of increased precip
Europe & Med																
France	43,390,296	161,868	516	83,523,888	C3	C3	C3	B2	C3	B3	A3	A3	B2	C2		
Hungary	54,301	47	1040	48,880												
NL	4,954,355	38,145	449	17,127,105												
Ukraine	1,182,922	4,715	2067	9,745,905												
Germany	62,694,661	268,728	498	133,826,544												
North America																
USA	22,639,359	71,900	1302	93,613,800	C3	C3	C3	B2	C3	B3	A3	A3	B2	C2	A2	A2
Canada	118,070,943	348,353	1441	501,976,673												
Central & North Asia																
Russia	1,466,524	5,968	2384	14,227,712	C3	C3	C3	C3	C3	C3	A3	A3	B2	C2		
Kazakhstan	9,229,642	32,071	5005	160,515,355												
Central & S America																
Argentina	1,141,781	2,425	1218	2,953,650					C3	B2	A3	A3	B2	C2		B2
Australia & NZ																
Australia	1,042,150	2,526	2082	5,259,132					C3		A3	A3	B2	C2	A2	A2
Total for selected countries	**265,866,934**	**936,746**		**1,022,818,644**												

Table S3. Barley: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk											
Country	Import to UK ($)	Import to UK (tonne)	Water demand (m3/tonne)	Total water consumption (m3)	Reduced frost risk to crop	Northwards expansion of crops	Crops already at climate thresholds likely to be	Greater risk of pests spreading Northward	Crop vulnerability to more frequent hot spells	Water stress from reduced summer rain reduces crop	Flood risk to crops	Storm risk to crops	Salt water intrusion risk to crops	CO2 fertilisation	Possibility of increased drought risk	Possibility of increased precip
Europe & Med																
France	4,120,975	18,617	572	10,648,924	C3	C3	C3	B2	C3	B3	A3	A3	B2	C2		
NL	1,580,819	6,901	566	3,905,966												
Germany	2,335,046	12,608	577	7,274,816												
North America																
USA	8,347	1	1118	1,118	C3	C3	C3	B2	C3	B3	A3	A3	B2	C2	A2	A2
Canada	731,426	n/a	1098													
Australia & NZ																
Australia	121	n/a							C3		A3	A3	B2	C2	A2	
Total for selected countries	**8,776,734**	**38,127**		**21,830,824**												

Table 4. Maize: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk						
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	Reduction in frost days & increase in number of days >10C in growing season	Beyond 36C, yields are reduced	Risk of drought results in reduced yield	Flood risk to crops	Storm risk to crops	Salt water intrusion risk to crops	Reduced water availability from changing melt patterns
Europe & Med											
Germany	4,403,026	916	476	436,016	C2	C2	B3	A3	A3	B2	
France	144,240,694	562,087	354	198,978,798							
Ukraine	1,165,631	4,078	1693	6,904,054							
Hungary	43,554	75	494	37,050							
North America											
USA	12,218,635	32,275	377	12,167,675	C2	C2	A2	A3	A3	B2	
Central & S. America											
Chile	82,832	4	295	1,180	C2	C2	B3	A3	A3	B2	A3
Brazil	5,789,634	23,026	1261	29,035,786							
Argentina	36,481,711	147,045	627	92,197,215							
South Asia											
India	109,548	261	2852	744,372	C2	C2	A3	A3	A3	B2	A3
Total for selected countries	**204,535,265**	**769,767**		**340,502,146**							

Table S5. Tomatoes: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk										
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/ tonne)	Total water consumption (m3)	Reduced frost risk to crop	Northwards expansion of crops	Crops already at climate thresholds likely to be vulnerable	Greater risk of pests spreading Northward	Crop vulnerability to more frequent hot spells	Water stress from reduced summer rain reduces crop yield	Flood risk to crops - uncertain	Storm risk to crops - uncertain	Salt water intrusion risk to crops	CO2 fertilisation	Possibility of increased precip or drought risk - uncertain
Europe & Med															
Netherlands	315,720,376	175,179	88	15,415,752	C3	C3	C3	B2	C3	B3	A3	A3	B2	C2	
Spain	225,258,467	136,538	76	10,376,888											
Italy	28,806,789	13,223	118	1,560,314											
Germany	21,297,688	9,916	90	892,440											
France	19,746,160	9,122	133	1,213,226											
Poland	18,244,072	12,523	242	3,030,566											
Belgium	9,760,278	5,583	114	636,462											
Africa															
Morocco	25,718,755	19,386	100	1,938,600											
Senegal	2,368,239	1,773	262	464,526											
Total for selected countries	**666,920,824**	**383,243**		**35,528,774**											

Table S6. Oranges: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk										
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/ tonne)	Total water consumption (m3)	Reduced frost risk to crop	Northwards expansion of crops	Crops already at climate thresholds likely to be vulnerable	Greater risk of pests spreading Northward	Crop vulnerability to more frequent hot spells	Water stress from reduced summer rain reduces crop yield	Flood risk to crops - uncertain	Storm risk to crops - uncertain	Salt water intrusion risk to crops	CO2 fertilisation	Reduced water availability from changing melt patterns
Europe & Med															
Spain	209,521,643	179,111	877	157,080,347	C3	C3	C3	B2	C3	B3	A3	A3	B2	C2	
Turkey	10,608,620	12,143	742	9,010,106											
Israel	10,121,806	11,045	2000	22,090,000											
Africa															
South Africa	98,280,874	110,573	1488	164,532,624	C3	C3	C3	B2	C3	B3	A3	A3	B2	C2	
Egypt	36,920,666	59,320	780	46,269,600											
Morocco	33,056,533	35,939	939	33,746,721											
Central & S. America															
Uruguay	22,875,019	27,975	1259	35,220,525	C3	C3	C3	B2	C3	B3	A3	A3	B2	C2	A3
Peru	15,918,552	16,375	3113	50,975,375											
Argentina	13,441,204	14,839	1422	21,101,058											
Total for selected countries	**450,744,917**	**467,320**		**540,026,356**											

Table S7. Bananas: climate import vulnerabilities

			Water Footprint		Climate Risk										
Country	**Import to UK($)**	**Import to UK(tonne)**	**Water demand (m3/tonne)**	**Total water consumption (m3)**	Reduced frost risk to crop	Northwards expansion of crops	Crops already at climate thresholds likely to be vulnerable	Greater risk of pests spreading Northward	Crop vulnerability to more frequent hot spells	Water stress from reduced summer rain reduces crop yield	Flood risk to crops - uncertain	Storm risk to crops - uncertain	Salt water intrusion risk to crops	CO2 fertilisation	Reduced water availability from changing melt patterns
Europe & Med															
Netherlands	36,297,725	42,007	147	6,175,029	C3	C3	C3	B2	C3	B3	A3	A3	B2	C2	
Ireland	12,342,692	17,751	147	2,609,397											
France	9,743,528	11,759	147	1,728,573											
Belgium	9,539,528	12,614	147	1,854,258											
Africa															
Ivory Coast	40,485,125	71,690	1110	79,575,900	C3	C3	C3	B2	C3	B3	A3	A3	B2	C2	
Cameroon	36,074,259	62,709	929	58,256,661											
Central & S. America															
Dominican Rep	164,215,818	191,018	768	146,701,824	C3	C3	C3	B2	C3	B3	A3	A3	B2	C2	A3
Columbia	160,042,358	212,901	211	44,922,111											
Costa Rica	144,827,957	203,789	117	23,843,313											
Belize	56,320,669	65,298	374	24,421,452											
Ecuador	39,830,048	64,540	190	12,262,600											
St Lucia	19,369,124	23,173	12420	287,808,660											
Brazil	8,425,967	10,398	483	5,022,234											
Total for selected countries	**737,514,798**	**989,647**		**695,182,012**											

Table S8. Bovine meat: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	Heat stress negatively impacts on animal health/productivity	Warmer winters may result in disease & pests surviving	Reduced frozen water reduces hypothermia and dehydration risks	Lower summer rain may reduce pasture growth for cattle	Risk of flooding/feeding difficulties	Salt water intrusion risk to grazing pastures
Europe & Med										
Ireland	814,543,101	168,075	6513	1,094,672,475	C3	B2	C2	B2	A2	B2
Netherlands	78,033,927	15,003	6513	97,714,539						
Germany	32,888,445	7,488	6513	48,769,344						
Italy	16,681,856	3,107	6513	20,235,891						
Belgium	15,201,542	2,749	6513	17,904,237						
Poland	8,108,504	1,864	6513	12,140,232						
France	8,013,225	2,773	6513	18,060,549						
Spain	6,576,903	2,383	6513	15,520,479						
Denmark	6,340,489	1,064	6513	6,929,832						
Central & S. America										
Uruguay	51,154,785	8,998	19488	175,353,024	C3	B2	C2	C2	A2	B2
Brazil	11,533,084	1,923	19488	37,475,424						
Africa										
Namibia	45,398,169	7,455	15415	114,918,825						
Botswana	32,531,960	6,356	15415	97,977,740						
Australia & NZ										
Australia	34,588,650	4,257	15182	64,629,774	C3	B2	C2	B2	A2	B2
New Zealand	18,918,900	2,785	15182	42,281,870						
Total for selected countries	1,180,513,540	**236,280**		**1,864,584,235**						

Table S9. Sheep/goat: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	Heat stress negatively impacts on animal health/ productivity	Warmer winters may result in disease & pests surviving	Reduced frozen water reduces hypothermia and dehydration risks	Lower summer rain may reduce pasture growth for cattle	Risk of flooding/ feeding difficulties	Salt water intrusion risk to grazing pastures
Europe & Med										
Ireland	23,658,027	5,954	8705	51,829,570	C3	B2	C2	B2	A2	B2
France	3,760,542	956	8705	8,321,980						
Spain	17,900,897	3,995	8705	34,776,475						
Iceland	4,146,174	885	8705	7,703,925						
Central & S. America										
Uruguay	5,282,391	742	12200	9,052,400	C3	B2	C2	C2	A2	B2
Argentina	6,593,717	1,431	12200	17,458,200						
Chile	3,014,954	650	12200	7,930,000						
Australia & NZ										
Australia	74,819,207	11,572	10600	122,663,200	C3	B2	C2	B2	A2	B2
New Zealand	450,860,134	74,317	10600	787,760,200						
Total for selected countries	590,036,043	**100,502**		**1,047,495,950**						

Table S10. Pig meat: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	Heat stress negatively impacts on animal health/ productivity	Warmer winters may result in disease & pests surviving	Reduced frozen water reduces hypothermia and dehydration risks	Lower summer rain may reduce pasture growth for cattle	Risk of flooding/feeding difficulties	Salt water intrusion risk to grazing pastures
Europe & Med										
Denmark	275,768,437	99,759	4429	441,832,611	C3	B2	C2	B2	A2	B2
Ireland	166,031,124	46,687	4429	206,776,723						
NL	146,912,863	*64,489*	4429	285,621,781						
Germany	135,177,006	48,386	4429	214,301,594						
Belgium	116,106,355	48,616	4429	215,320,264						
France	91,485,860	30,075	4429	133,202,175						
Spain	51,597,582	16,275	4429	72,081,975						
Total for selected countries	**983,079,227**	**354,287**		**1,569,137,123**						

Table S11. Poultry: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	Heat stress negatively impacts on animal health/ productivity	Warmer winters may result in disease & pests surviving	Reduced frozen water reduces hypothermia and dehydration risks	Lower summer rain may reduce pasture growth for cattle	Risk of flooding/feeding difficulties	Salt water intrusion risk to grazing pastures
Europe & Med										
NL	634,421,317	145,879	1787	260,685,773	C3	B2	C2	B2	A2	B2
Ireland	217,888,891	63,969	1787	114,312,603						
Poland	157,979,718	39,531	1787	70,641,897						
France	84,882,008	20,192	1787	36,083,104						
Germany	84,625,821	25,304	1787	45,218,248						
Belgium	72,372,678	23,727	1787	42,400,149						
Denmark	37,994,461	8,577	1787	15,327,099						
Italy	37,186,815	9,182	1787	16,408,234						
Portugal	22,609,044	5,599	1787	10,005,413						
Central & S. America										
Chile	40,992,328	9,887	4234	41,861,558	C3	B2	C2	C2	A2	B2
Brazil	25,888,085	10,183	4234	43,114,822						
Total for selected countries	**1,290,164,894**	**362,030**		**696,058,900**						

Table S12. Fresh fish: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk									
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	Greater risk of mass stock death	Inland lake water levels may change - uncertain	Inland lake water levels may lower	Risk of poor water quality & algal blooms	Storms affect ability to fish	Harbour infrastructure vulnerable	Warmer water ecosystem effects -wild fish	Warmer water ecosystem effects -farmed fish	Patterns affect ecosystems	Acidification affects ecosystems
Europe & Med														
Iceland	385,304,561	65,765	0.15	9,865	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
Faroe Is	181,916,962	37,383	0.15	5,607										
Norway	144,672,439	43,727	0.15	6,559										
Sweden	114,372,511	18,544	0.15	2,782										
Denmark	113,065,201	34,511	0.15	5,177										
Germany	83,499,238	15,070	0.15	2,261			B0							
Netherlands	79,083,827	13,104	0.15	1,966										
Ireland	29,000,445	15,425	0.15	2,314										
Central & North Asia														
Russia	74,060,761	16,866	0.15	2,530	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
East Asia														
China	159,227,514	41,553	0.15	6,233	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
Southeast Asia														
Vietnam	41,052,277	12,921	0.15	1,938	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
Total for selected countries	**1,405,255,736**	**314,869**		**47,230**										

Table S13. Fish fillets: climate import vulnerabilities

	Imports (0344)		Imports (0345)		Water Footprint		Climate Risk									
Country	Import to UK($)	Import to UK(tonne)	Import to UK($)	Import to UK(tonne)	Water demand (m3/ tonne)	Total water consumption (m3)	Greater risk of mass stock death	Inland lake water levels may change - uncertain	Inland lake water levels may lower	Risk of poor water quality & algal blooms	Storms affect ability to fish	Harbour infrastructure vulnerable	Warmer water ecosystem effects -wild fish	Warmer water ecosystem effects -farmed fish	Patterns affect ecosystems	Acidification affects ecosystems
Europe & Med																
Iceland	153,250,025	23,863	119,560,369	12,667	7.5	273,975	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
Faroe Is	38,133,770	6,687	8,629,013	1,997	7.5	65,130										
Norway	71,602,823	13,577	1,708,931	812	7.5	107,918										
Sweden	125,574	25	67,098,353	9,244	7.5	69,518										
Denmark	45,477,559	9,075	14,683,383	1,917	7.5	82,440										
Germany	70,202,971	12,247	3,219,564	575	7.5	96,165			B0							
Netherlands	29,735,159	4,685	16,728,124	1,780	7.5	48,488										
Central & North Asia																
Russia	63,595,552	12,859	1,830,788	654	7.5	101,348	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
East Asia																
China	150,921,973	37,941	2,703,135	984	7.5	291,938	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
Southeast Asia																
Vietnam	35,086,031	10,764	3,634,256	1,275	7.5	90,293	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
Sri Lanka	2,878,664	540	28,163,708	1,957	7.5	18,728	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
Total for selected countries	**661,010,101**	**132,263**	**267,959,624**	**33,862**		**1,227,210**										

Table S14. Prepared/preserved fish: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk									
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/ tonne)	Total water consumption (m3)	Greater risk of mass stock death	Inland lake water levels may change - uncertain	Inland lake water levels may lower	Risk of poor water quality & algal blooms	Storms affect ability to fish	Harbour infrastructure vulnerable	Warmer water ecosystem effects -wild fish	Warmer water ecosystem effects -farmed fish	Patterns affect ecosystems	Acidification affects ecosystems
Europe & Med														
Denmark	106,510,993	18,681	15	280,215	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
Germany	125,950,631	29,013	15	435,195			B0							
North America														
Canada	91,224,054	12,556	15	188,340	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
USA	66,976,577	10,269	15	154,035										
Africa														
Mauritius	106,504,858	28,612	15	429,180	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
Seychelles	67,609,199	14,581	15	218,715			B0							
Ghana	70,322,376	18,586	15	278,790										
Southeast Asia														
Thailand	161,776,366	33,239	15	498,585	C0	C0	A0	A1	A1	C1	C2	C0	A1	B3
Philippines	38,751,549	14,522	15	217,830										
Total for selected countries	**835,626,603**	**180,059**		**2,700,885**										

Table S15. Petroleum: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk				
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	Dried soil - Subsidence risk to industry infrastructure	Less ice on off-shore decks	Decrease in precipn affects efficiency of extraction	Design consideration for rigs	Potential for disruption
Europe & Med									
Norway	21,967,001,856	36,729,700	2	73,459,400	A2	C1	A2	A1	A3
Africa									
Libya	1,619,596,595	2,677,182	2	5,354,364	A2	C1	A2	A1	A3
Nigeria	1,046,828,803	1,737,556	2	3,475,112					
Tunisia	669,713,378	1,061,157	2	6,604,558					
Algeria	644,201,586	979,004	2	1,958,008					
Central & N. Asia									
Russia	1,976,152,263	3,302,279	2	6,604,558	A2	C1	A2	A1	A3
Total for selected countries	**27,923,494,481**	**46,486,878**		**97,456,000**					

Table S16. Natural gas: climate import vulnerabilities. SLR: sea level rise

	Imports			Water Footprint		Climate Risk						
Country	Import to UK($)	Import to UK(billion cubic metres)	Imports to UK(billion GJ)	Water demand (m3/ GJ)	Total water consumption (m3)	Dried soil - Subsidence risk to industry infrastructure	Less ice on off-shore decks	Decrease in precipn affects efficiency of extraction	Design consideration for rigs	Potential for disruption	SLR combined with storm surge disruptive	Affects rig stability
Europe & Med												
Norway	4,498,767,990	26.57	1.017	0.11	111,822,321	A2	C1	A2	A1	A3	B2	A0
Netherlands	2,400,470,208	8.07	0.309	0.11	33,963,347							
Middle East												
Qatar	2,834,793,154	13.89	0.531	0.11	58,457,359	A2	C1	A2	A1	A3	B2	A0
Africa												
Algeria	233,600,126	1.25	0.048	0.11	5,260,741	A2	C1	A2	A1	A3	B2	A0
Central & S. America												
Trinidad and Tobago	361,839,244	1.63	0.062	0.11	6,860,007	A2	C1	A2	A1	A3	B2	A0
Total for selected countries	**10,329,470,722**	**51.41**	1.967		**216,363,775**							

Table S17. Coal: climate import vulnerabilities. SLR: sea level rise

	Imports		Water Footprint		Climate Risk			
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/ tonne)	Total water consumption (m3)	Risk of less water available for operations	Flood risk	Potential for disruption	SLR combined with storm surge disruptive
Europe & Med								
Poland	54,763,048	563,170	5	2,815,850	A2			
North America								
USA	551,853,388	4,004,780	5	20,023,900		A3	A3	B2
Canada	78,607,450	424,448	5	2,122,240				
Central & N. Asia								
Russia	809,289,160	8,262,841	5	41,314,205	A2			
Southeast Asia								
Indonesia	28,217,296	238,567	5	1,192,835	A2			
Central & S. America								
Colombia	571,898,236	5,503,131	5	27,515,655	A2			
Australia & NZ								
Australia	622,550,721	3,299,055	5	16,495,275	A2			
Africa								
S. Africa	73,143,624	679,666	5	3,398,330	A2			
Total for selected countries	**2,790,322,923**	**22,975,658**		**114,878,290**				

Table S18. Iron ore: climate import vulnerabilities. SLR: sea level rise

	Imports		Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/ tonne)	Total water consumption (m3)	Higher temperature is risk to miners health	Risk of less water available for operations	Flood risk	Design consideration for rigs	Potential for disruption	SLR combined with storm surge disruptive
Europe & Med										
Norway	18,344,322	187,852	0.27	50,720	C2	A2	A3	A1	A3	B2
Ukraine	6,049,139	68,916	0.27	18,607						
North America										
Canada	136,681,372	954,661	0.27	257,758	C2	A2	A3	A1	A3	B2
Central & N. Asia										
Russia	222,039,080	1,562,757	0.27	421,944	C2	A2	A3	A1	A3	B2
South Asia										
India	12,080,405	161,487	0.27	43,601	C2	A2	A3	A1	A3	B2
Central & S. America										
Brazil	926,682,082	6,926,978	0.27	1,870,284	C2	A2	A3	A1	A3	B2
Venezuela	9,777,844	75,860	0.27	20,482						
South Africa	73,276,553	629,583	0.27	169,987	C2	A2	A3	A1	A3	B2
Total for selected countries	**1,404,930,797**	**10,568,094**		**2,853,385**						

Table S19. Organic chemicals: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/ tonne)	Total water consumption (m3)	High temps - greater demand for water & conflict	Drought limits production & power generation	Greater surface run-off enhances water availability	Changes in precipn may result in water stress	Risk to water storage & availability	Salt-water intrusion to coastal aquifers
Europe & Med										
Germany	1,389,366,208	531,504	40	21,260,160	B1	B3	B1	A2	A2	C1
France	1,172,165,237	362,857	40	14,514,280						
Netherlands	1,632,314,332	922,098	40	36,883,920						
Belgium	884,768,561	617,782	40	24,711,280						
Ireland	4,035,294,241	21,993	40	879,720						
Spain	251,610,583	168,508	40	6,740,320						
Italy	201,750,192	75,257	40	3,010,280						
Switzerland	443,588,414	18,182	40	727,280						
North America										
USA	713,776,300	174,888	40	6,995,520	B1	B3	B1	A2	A2	C1
East Asia										
China	447,675,911	95,355	40	3,814,200	B1	B3	B1	A2	A2	C1
South Asia										
India	242,459,478	29,700	40	1,188,000	B1	B3	B1	A2	A2	C1
Total for selected countries	11,414,769,457	3,018,124		**120,724,960**						

Table S20. Inorganic chemicals: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	High temps - greater demand for water & conflict	Drought limits production & power generation	Greater surface run-off enhances water availability	Changes in precipn may result in water stress	Risk to water storage & availability	Salt-water intrusion to coastal aquifers
Europe & Med										
France	703,576,727	127,456	158	20,138,048	B1	B3	B1	A2	A2	C1
Netherlands	465,324,701	358,137	158	56,585,646						
Germany	453,413,014	548,484	158	86,660,472						
Belgium	190392869	236,526	158	37,371,108						
North America										
USA	183,168,621	45,059	158	7,119,322	B1	B3	B1	A2	A2	C1
Central & N. Asia										
Russia	257,507,565	19,105	158	3,018,590	B1	B3	B1	A2	A2	C1
East Asia										
China	210,152,524	112,769	158	17,817,502	B1	B3	B1	A2	A2	C1
Japan	120,460,835	3,044	158	480,952						
Total for selected countries	**2,583,996,856**	**1,450,580**		**229,191,640**						

Table S21. Pharmaceuticals: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	High temps - greater demand for water & conflict	Drought limits production & power generation	Greater surface run-off enhances water availability	Changes in precipn may result in water stress	Risk to water storage & availability	Salt-water intrusion to coastal aquifers
Europe & Med										
Germany	3,442,337,662	85,657	128	10,964,096	B1	B3	B1	A2	A2	C1
NL	2,537,176,423	13,991	128	1,790,848						
Belgium	2,612,177,588	12,201	128	1,561,728						
France	1,353,555,518	25,999	128	3,327,872						
Switzerland	2,082,675,782	4,510	128	577,280						
Ireland	1,838,514,748	44,306	128	5,671,168						
Italy	1,201,685,046	15,994	128	2,047,232						
Spain	1,009,753,915	12,112	128	1,550,336						
North America										
USA	4,012,015,379	10,100	128	1,292,800	B1	B3	B1	A2	A2	C1
Total for selected countries	**20,089,892,061**	**224,870**		**28,783,360**						

Table S22. Plastics: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	High temps - greater demand for water & conflict	Drought limits production & power generation	Greater surface run-off enhances water availability	Changes in precipn may result in water stress	Risk to water storage & availability	Salt-water intrusion to coastal aquifers
Europe & Med										
Germany	1,521,702,216	706,184	500	353,092,000	B1	B3	B1	A2	A2	C1
France	682,437,447	394,875	500	197,437,500						
Spain	152,297,841	76,515	500	38,257,500						
Italy	266,871,206	113,134	500	56,567,000						
Switzerland	22,959,924	4,647	500	2,323,500						
Netherlands	1,136,741,869	641,906	500	320,953,000						
Belgium	1,407,739,360	805,119	500	402,559,500						
Ireland	103,851,907	55,839	500	27,919,500						
Sweden	79,092,520	43,107	500	21,553,500						
Czech Republic	33,407,154	17,631	500	8,815,500						
Poland	45,819,339	23,688	500	11,844,000						
Austria	44,278,312	25,091	500	12,545,500						
North America										
Canada	2,964,305	608	500	304,000	B1	B3	B1	A2	A2	C1
USA	383,611,665	91,601	500	45,800,500						
East Asia										
China	43,548,504	14,025	500	7,012,500	B1	B3	B1	A2	A2	C1
Japan	86,057,370	13,305	500	6,652,500						
S. Korea	50,909,833	22,017	500	11,008,500						
Southeast Asia										
Malaysia	3,787,649	2,380	500	1,190,000	B1	B3	B1	A2	A2	C1
Thailand	31,443,269	14,542	500	7,271,000						
Central & S. America										
Mexico	10,838,384	8,469	500	4,234,500	B1	B3	B1	A2	A2	C1
South Asia										
India	6,863,400	2,526	500	1,263,000	B1	B3	B1	A2	A2	C1
Total for selected countries	**6,117,223,474**	**3,077,209**		**1,538,604,500**						

Table S23. Paper & paperboard: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	High temps - greater demand for water & conflict	Drought limits production & power generation	Greater surface run-off enhances water availability	Changes in precipn may result in water stress	Risk to water storage & availability	Salt-water intrusion to coastal aquifers
Europe & Med										
Germany	1,879,151,143	1,568,801	300	470,640,400	B1	B3	B1	A2	A2	C1
France	834,020,524	697,327	300	209,198,010						
Spain	213,092,809	203,258	300	60,977,476						
Italy	414,952,655	289,999	300	86,999,621						
Switzerland	13,879,434	5,080	300	1,523,969						
Netherlands	521,638,521	398,957	300	119,687,103						
Belgium	347,128,496	196,197	300	58,858,964						
Ireland	109,163,550	49,825	300	14,947,406						
Sweden	1,160,462,782	1,375,850	300	412,755,138						
Czech Republic	72,337,773	48,878	300	14,663,357						
Poland	121,339,998	118,198	300	35,459,434						
Austria	223,183,871	204,917	300	61,475,193						
North America										
Canada	136,707,889	177,648	300	53,294,270	B1	B3	B1	A2	A2	C1
USA	334,057,995	234,528	300	70,358,403						
East Asia										
China	561,743,291	230,631	300	69,189,183	B1	B3	B1	A2	A2	C1
Japan	30,794,396	5,081	300	1,524,204						
S. Korea	17,986,258	8,669	300	2,600,687						
Southeast Asia										
Malaysia	14,031,338	6,316	300	1,894,769	B1	B3	B1	A2	A2	C1
Thailand	4,963,578	1,068	300	320,327						
Central & S. America										
Mexico	1,676,657	923	300	276,803	B1	B3	B1	A2	A2	C1
South Asia										
India	44,594,544	24,861	300	7,458,270	B1	B3	B1	A2	A2	C1
Total for selected countries	**7,056,907,502**	**5,847,010**		**1,754,102,987**						

Table S24. Iron & steel: climate import vulnerabilities

	Imports		Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(tonne)	Water demand (m3/tonne)	Total water consumption (m3)	High temps - greater demand for water & conflict	Drought limits production & power generation	Greater surface run-off enhances water availability	Changes in precipn may result in water stress	Risk to water storage & availability	Salt-water intrusion to coastal aquifers
Europe & Med										
Germany	1,268,606,782	954,197	3	2,862,591	B1	B3	B1	A2	A2	C1
France	703,352,845	573,220	3	1,719,660						
Spain	558,429,906	484,994	3	1,454,982						
Italy	644,631,032	376,096	3	1,128,288						
Switzerland	43,157,860	23,412	3	70,236						
Netherlands	547,066,346	507,314	3	1,521,942						
Belgium	589,260,504	546,607	3	1,639,821						
Ireland	88,118,091	70,790	3	212,370						
Sweden	374,219,676	288,310	3	864,930						
Czech Republic	147,084,374	118,858	3	356,574						
Poland	65,548,924	43,129	3	129,387						
Austria	155,692,968	91,609	3	274,827						
North America										
Canada	18,498,374	14,994	3	44,982	B1	B3	B1	A2	A2	C1
USA	236,892,792	40,702	3	122,106						
East Asia										
China	363,643,067	327,867	3	983,601	B1	B3	B1	A2	A2	C1
Japan	282,992,512	115,641	3	346,923						
S. Korea	96,029,452	80,346	3	241,038						
Southeast Asia										
Malaysia	8,879,571	1,320	3	3,960	B1	B3	B1	A2	A2	C1
Thailand	9,623,916	8,397	3	25,191						
Central & S. America										
Mexico	17,331,997	13,605	3	40,815	B1	B3	B1	A2	A2	C1
South Asia										
India	119,898,353	93,518	3	280,554	B1	B3	B1	A2	A2	C1
Total for selected countries	**6,338,959,342**	**4,774,926**		**14,324,778**						

Table S25. Electric current: climate import vulnerabilities. SLR: sea level rise

	Imports			Water Footprint		Climate Risk					
Country	Import to UK($)	Import to UK(Gigawatt hours)	Import to UK(GJ)	Water demand (m3/GJ)	Total water consumption (m3)	Higher temperature is risk to miners health	Risk of less water available for operations	Flood risk	Design consideration for rigs	Potential for disruption	SLR combined with storm surge disruptive
Europe & Med											
France	483,327,760	4,110	14,796,000	0.09	1,331,640	C2	A2	A3	A1	A3	B2
Ireland	20,160,625	760	2,736,000	0.04	109,440						
Total for selected countries	503,488,385	4,870	**17,532,000**		**1,441,080**						