CLIMATE VULNERABILITY MONITOR







COUNTRY PROFILE







THE MONITOR ASSESSMENT

The Climate Vulnerability Monitor provides a comprehensive national-level assessment of vulnerabilities and impact specifically related to contemporary climate change and carbon intensiveness. This 2012 Monitor assessment was commissioned by the Climate Vulnerable Forum and has been independently developed by DARA. It is grounded in leading and up-to-date scientific studies, research and data assimilated on the basis of an externally reviewed methodology. The assessment spans 34 indicators of impact/vulnerability: 22 for climate change ("Climate") and 12 for carbon intensiveness ("Carbon"). Estimates in human, economic and environmental terms are for 2010 and 2030. Vulnerability at country-level and by indicator is comparative to the 184 countries included in the assessment.

→ For the full report, data & additional info: www.daraint.org/cvm2 - cvm@daraint.org - +34 915310372



ECONOMIC NATIONAL LOSS TOTALS: LUXEMBOURG

ADDITIONAL ECONOMIC COSTS (NEGATIVE NUMBERS SHOW POSITIVE EFFECTS) - YEARLY AVERAGE



2010 **NIL** 2030 NIL

CARBON INTENSIVENESS LOSSES PER YEAR

2010 **NIL** 2030 NIL

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE



HUMAN NATIONAL LOSS TOTALS: LUXEMBOURG

ADDITIONAL HUMAN IMPACTS (NEGATIVE NUMBERS SHOW POSITIVE EFFECTS) - YEARLY AVERAGE

ADDITIONAL MORTALITY-YEARLY AVERAGE

CLIMATE +CARBON

COMBINED

2010 40 2030 60 CLIMATE

🞝 CARBON

ΔΠΠΙΤΙΠΝΙΔΙ

2010 **200**

2030 500

2010 1,000

2030 2,000

FULL COUNTRY ASSESSMENT: LUXEMBOURG

		VULNERABILITY LEVEL	ADDITIONAL ECONOMIC COSTS (MILLION USD PPP)		ADDITIONAL MORTALITY		ADDITIONAL AFFECTED POPULATION (1000s)		OTHER VALUE 1*		OTHER VALUE 2*		_			
		2010 2030	2010	2030	2010	2030	2010	2030	2010	2030	2010	2030		ITVI EVELO		
	ENVIRONMENTAL DISASTERS												VULNERABIL			
	DROUGHT		1	1									+ Acute+	+ High	+	
	FLOODS AND LANDSLIDES			1			0	0					- Acute-	- High-		
₩	STORMS		1	1									- Severe+	Mode	rate	
	WILDFIRES												Severe-		,,,,,,	
	TOTAL		1	3	0	0	0	0					Severe-	Low		
	HABITAT CHANGE															
	BIODIVERSITY		15	40					-30	-60	90	300	+ = Upper tier			
	DESERTIFICATION												 = Lower tier of vulnerability level 			
	HEATING AND COOLING		-35	-100					-150	-300	-70	-150				
	LABOUR PRODUCTIVITY								5	5			Environme	ental disasters		
	PERMAFROST												<u> </u>			
	SEA-LEVEL RISE		=0	450									Habitat change			
	WATER	- +	50	150			_	_					■ ● Health impact			
	TOTAL		30	90			0	0					ndustry stress			
	HEALTH IMPACT												_ Industry stress			
	DIARRHEAL INFECTIONS				0	0	0									
	HEAT AND COLD ILLNESSES	<u> </u>			1	1							CLIMATE =	Impact/Vulne	rability	
	HUNGER													to Climate Cha	ange	
	MALARIA AND VECTOR-BORNE												CARBON =	rability		
	MENINGITIS							0					•	nsiveness		
l i	TOTAL				1	1	0	0								
	INDUSTRY STRESS													OTHER	OTHER	
	AGRICULTURE			1										VALUE 1	VALUE 2	
	FISHERIES													Contraction	Decline in	
	FORESTRY												BIODIVERSITY	of biological	biological	
-	HYDRO ENERGY													zones (km²) (cumulative)	richness	
	TOURISM													Additional land	1	
	TRANSPORT		0	1									DESERTI- FICATION	degraded (km²		
'	TOTAL		31	92	0	4	0	0					FICATION	(cumulative)		
	CLIMATE TOTAL		31	92	U		U	U					HEATING &			
1 1	ENVIRONMENTAL DISASTERS												COOLING	load (GWh)		
	OIL SANDS													Share of		
	OIL SPILLS												LABOUR	workforce		
	TOTAL		0	0									PRODUCTIVITY	particularly affected (%)		
	HABITAT CHANGE															
	BIODIVERSITY		5	15					65	150			SEA-LEVEL	Net loss of land (km²)		
	CORROSION												RISE	(cumulative)		
	WATER	+ +	5	5					65	55				Loss in water		
	TOTAL		10	20									WATER	runoff 2030		
	HEALTH IMPACT													(km³)		
	AIR POLLUTION				15	25	0	1					OIL SANDS	Tonnes toxic		
	INDOOR SMOKE				15	25	0	0					012 07 11 400	waste (1000s)		
	OCCUPATIONAL HAZARDS	+ -			5	5	0	0						Gallons oil		
	SKIN CANCER	- +			5	10	0	0					OIL SPILLS	spill (1000s)		
!	TOTAL				40	65	1	2								
	INDUSTRY STRESS												BIODIVERSITY	Decline in		
	AGRICULTURE			-1									SIODIVERSITI	biological richr	iess	
	FISHERIES												Valume of			
	FORESTRY			1									WATER	water to treat		
	TOTAL		0	0										(millions m³)		
	CARBON TOTAL		10	20	40	65	- 1	2								