

COUNTRY PROFILE

MACEDONIA

CLIMATE: **MODERATE** CARBON: **MODERATE**

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: MACEDONIA

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



LOSSES PER YEAR
2010 **0.9%GDP**
2030 **1.8%GDP**



LOSSES PER YEAR
2010 **0.5%GDP**
2030 **0.4%GDP**

HUMAN NATIONAL LOSS TOTALS: MACEDONIA

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



ADDITIONAL MORTALITY-YEARLY AVERAGE
2010 **1,000**
2030 **1,000**



ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE
2010 **2,500** 2030 **2,500**



2010 **15,000** 2030 **15,000**

FULL COUNTRY ASSESSMENT: MACEDONIA

	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
ENVIRONMENTAL DISASTERS												
DROUGHT	+	-	1	5								
FLOODS AND LANDSLIDES	-	-	5	50			1	1				
STORMS												
WILDFIRES												
TOTAL			6	55	0	0	1	1				
HABITAT CHANGE												
BIODIVERSITY	-	+	65	450					-2,000	-4,000	90	300
DESERTIFICATION												
HEATING AND COOLING			-40	-250					-200	-350	-200	-300
LABOUR PRODUCTIVITY			1	5					4	4		
PERMAFROST												
SEA-LEVEL RISE												
WATER	+	+	100	850					0	1		
TOTAL			126	1,055			0	0				
HEALTH IMPACT												
DIARRHEAL INFECTIONS					0	0	0	0				
HEAT AND COLD ILLNESSES	+	+			45	60						
HUNGER												
MALARIA AND VECTOR-BORNE												
MENINGITIS												
TOTAL					45	60	0	0				
INDUSTRY STRESS												
AGRICULTURE		-	15	100								
FISHERIES												
FORESTRY		+	5	35								
HYDRO ENERGY	+	-	5	30								
TOURISM												
TRANSPORT												
TOTAL			25	166								
CLIMATE TOTAL			156	1,276	45	60	1	1				
ENVIRONMENTAL DISASTERS												
OIL SANDS												
OIL SPILLS												
TOTAL			0	0								
HABITAT CHANGE												
BIODIVERSITY			35	250					65	200		
CORROSION	+	+	1	1								
WATER	+	+	10	45					350	500		
TOTAL			46	296								
HEALTH IMPACT												
AIR POLLUTION	+	+			600	700	7	10				
INDOOR SMOKE	+	+			400	350	3	3				
OCCUPATIONAL HAZARDS	+	+			25	25	3	3				
SKIN CANCER	+	+			35	70	0	0				
TOTAL					1060	1145	13	16				
INDUSTRY STRESS												
AGRICULTURE	+		30	-55								
FISHERIES												
FORESTRY												
TOTAL			30	-55								
CARBON TOTAL			76	241	1,060	1,145	13	16				

VULNERABILITY LEVELS:
 + Acute+ High+
 - Acute- High-
 + Severe+ Moderate
 - Severe- Low

+ = Upper tier of vulnerability level
 - = Lower tier of vulnerability level

- Environmental disasters
 - Habitat change
 - Health impact
 - Industry stress
 - CLIMATE = Impact/Vulnerability to Climate Change
 - CARBON = Impact/Vulnerability to Carbon Intensiveness
- | | OTHER VALUE 1 | OTHER VALUE 2 |
|---------------------|---|--------------------------------|
| BIODIVERSITY | Contraction of biological zones (km ²) (cumulative) | Decline in biological richness |
| DESERTIFICATION | Additional land degraded (km ²) (cumulative) | |
| HEATING & COOLING | Change in energy load (GWh) | |
| LABOUR PRODUCTIVITY | Share of workforce particularly affected (%) | |
| SEA-LEVEL RISE | Net loss of land (km ²) (cumulative) | |
| WATER | Loss in water runoff 2030 (km ³) | |
| OIL SANDS | Tonnes toxic waste ('000s) | |
| OIL SPILLS | Gallons oil spill ('000s) | |
| BIODIVERSITY | Decline in biological richness | |
| WATER | Volume of water to treat (millions m ³) | |