

COUNTRY PROFILE

UKRAINE

CLIMATE: **MODERATE**

CARBON: **HIGH**

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: UKRAINE

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

CLIMATE CHANGE IMPACT

LOSSES PER YEAR

2010 **0.8%GDP**
2030 **1.4%GDP**

CARBON INTENSIVENESS IMPACT

LOSSES PER YEAR

2010 **0.4%GDP**
2030 **0.3%GDP**

HUMAN NATIONAL LOSS TOTALS: UKRAINE

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

CLIMATE + CARBON COMBINED

ADDITIONAL MORTALITY-YEARLY AVERAGE

2010 **45,000**
2030 **40,000**

CLIMATE

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE

2010 **2,750,000** 2030 **3,250,000**

2010 **450,000** 2030 **450,000**

FULL COUNTRY ASSESSMENT: UKRAINE

	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	+	+	20	75								
FLOODS AND LANDSLIDES	-	+	40	300	1	1	25	15				
STORMS			1	5								
WILDFIRES												
TOTAL			61	380	1	1	25	15				
HABITAT CHANGE												
BIODIVERSITY	+	+	700	4,750					-800	-1,500	90	250
DESERTIFICATION	+	+	450	2,750			700	1,000	9,000	20,000		
HEATING AND COOLING			-1,250	-8,000					-6,250	-15,000	-3,000	-5,750
LABOUR PRODUCTIVITY			30	200					5	5		
PERMAFROST												
SEA-LEVEL RISE			1,000	5,250			2	2	45	95		
WATER	-	+	1,000	7,000					1	5		
TOTAL			1,930	11,950			702	1,002				
HEALTH IMPACT												
DIARRHEAL INFECTIONS					1	0	0	0				
HEAT AND COLD ILLNESSES	+	+			2,000	2,250						
HUNGER												
MALARIA AND VECTOR-BORNE					1	1	0	0				
MENINGITIS												
TOTAL					2,001	2,251	0	0				
INDUSTRY STRESS												
AGRICULTURE			150	1,250								
FISHERIES			55	600								
FORESTRY			1	10								
HYDRO ENERGY	+	+	150	800								
TOURISM			-5	-35								
TRANSPORT												
TOTAL			351	2,625								
CLIMATE TOTAL			2,341	14,955	2,002	2,251	727	1,017				
ENVIRONMENTAL DISASTERS												
OIL SANDS												
OIL SPILLS			1	5					10	10		
TOTAL			1	5								
HABITAT CHANGE												
BIODIVERSITY			350	2,250					60	150		
CORROSION	-	-	5	20								
WATER	+	+	100	600					7,250	10,000		
TOTAL			455	2870								
HEALTH IMPACT												
AIR POLLUTION	+	+			30,000	30,000	300	350				
INDOOR SMOKE	+	+			10,000	8,000	80	60				
OCCUPATIONAL HAZARDS	+	+			350	350	45	45				
SKIN CANCER	+	+			300	600	0	1				
TOTAL					40650	38950	425	456				
INDUSTRY STRESS												
AGRICULTURE	+	+	250	-1,500								
FISHERIES			1	10								
FORESTRY			45	100								
TOTAL			296	-1390								
CARBON TOTAL			752	1,485	40,650	38,950	425	456				

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

- BIODIVERSITY: OTHER VALUE 1: Contraction of biological zones (km²) (cumulative); OTHER VALUE 2: Decline in biological richness
- DESERTIFICATION: Additional land degraded (km²) (cumulative)
- HEATING & COOLING: Change in energy load (GWh)
- LABOUR PRODUCTIVITY: Share of workforce particularly affected (%)
- SEA-LEVEL RISE: Net loss of land (km²) (cumulative)
- WATER: Loss in water runoff 2030 (km³)
- OIL SANDS: Tonnes toxic waste ('000s)
- OIL SPILLS: Gallons oil spill ('000s)
- BIODIVERSITY: Decline in biological richness
- WATER: Volume of water to treat (millions m³)