

COUNTRY PROFILE

GERMANY

CLIMATE: **LOW**

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: GERMANY

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

CLIMATE CHANGE IMPACT

LOSSES PER YEAR
2010 **NIL**
2030 **NIL**

CARBON INTENSIVENESS IMPACT

LOSSES PER YEAR
2010 **NIL**
2030 **NIL**

HUMAN NATIONAL LOSS TOTALS: GERMANY

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

CLIMATE + CARBON COMBINED

ADDITIONAL MORTALITY-YEARLY AVERAGE
2010 **15,000**
2030 **20,000**

CLIMATE

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE
2010 **2,750,000** 2030 **3,000,000**

CARBON

2010 **400,000** 2030 **550,000**

FULL COUNTRY ASSESSMENT: GERMANY

	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	-	+	70	100								
FLOODS AND LANDSLIDES			100	350	1	1	4	6				
STORMS			100	350			0	0				
WILDFIRES												
TOTAL			270	800	1	1	4	6				
HABITAT CHANGE												
BIODIVERSITY			1,000	3,000					-1,250	-2,500	90	250
DESERTIFICATION												
HEATING AND COOLING			-8,000	-20,000					-30,000	-55,000	-15,000	-30,000
LABOUR PRODUCTIVITY									6	6		
PERMAFROST												
SEA-LEVEL RISE			1,000	1,750			2	3	85	150		
WATER	+	+	5,000	15,000					1	5		
TOTAL			-1,000	-250			2	3				
HEALTH IMPACT												
DIARRHEAL INFECTIONS					0	0	0	0				
HEAT AND COLD ILLNESSES					700	1,250						
HUNGER												
MALARIA AND VECTOR-BORNE												
MENINGITIS												
TOTAL					700	1,250	0	0				
INDUSTRY STRESS												
AGRICULTURE			90	200								
FISHERIES			15	55								
FORESTRY			-1	-10								
HYDRO ENERGY			-10	-10								
TOURISM			10	70								
TRANSPORT			45	200								
TOTAL			149	505								
CLIMATE TOTAL			-581	1,055	701	1,251	7	9				
ENVIRONMENTAL DISASTERS												
OIL SANDS												
OIL SPILLS												
TOTAL			0	0								
HABITAT CHANGE												
BIODIVERSITY			750	2,250					100	250		
CORROSION			40	40								
WATER			350	450					10,000	8,750		
TOTAL			1140	2740								
HEALTH IMPACT												
AIR POLLUTION					10,000	10,000	250	400				
INDOOR SMOKE					3,750	4,750	40	50				
OCCUPATIONAL HAZARDS					700	750	100	100				
SKIN CANCER					850	1,750	4	8				
TOTAL					15300	17250	394	558				
INDUSTRY STRESS												
AGRICULTURE			250	-100								
FISHERIES			5	15								
FORESTRY			550	650								
TOTAL			805	565								
CARBON TOTAL			1,945	3,305	15,300	17,250	394	558				

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 (km²) (cumulative) 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 (1000s)

OIL SPILLS Gallons oil spill (1000s)

BIODIVERSITY Decline in biological richness

WATER Volume of water to treat (millions m³)