

COUNTRY PROFILE

FINLAND

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: FINLAND

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 **0.6%GDP**
 2030 **1.0%GDP**

HUMAN NATIONAL LOSS TOTALS: FINLAND

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

CLIMATE + CARBON COMBINED
 ADDITIONAL MORTALITY-YEARLY AVERAGE
 2010 **900**
 2030 **1,000**

CLIMATE
 ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE
 2010 **250,000** 2030 **250,000**

CARBON
 2010 **25,000** 2030 **30,000**

FULL COUNTRY ASSESSMENT: FINLAND

	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
CLIMATE												
ENVIRONMENTAL DISASTERS												
DROUGHT			1	1								
FLOODS AND LANDSLIDES				1								
STORMS				1								
WILDFIRES												
TOTAL			1	3	0	0	0	0				
HABITAT CHANGE												
BIODIVERSITY			150	400					-2,750	-5,250	10	40
DESERTIFICATION												
HEATING AND COOLING			-550	-1,500					-3,000	-5,500	-1,000	-1,750
LABOUR PRODUCTIVITY			-150	-500					6	6		
PERMAFROST			15	30			3	7				
SEA-LEVEL RISE			85	150			0	0	15	50		
WATER			-1,000	-3,000					-1	-1		
TOTAL			-1,450	-4,420			4	8				
HEALTH IMPACT												
DIARRHEAL INFECTIONS					0	0	0	0				
HEAT AND COLD ILLNESSES					30	70						
HUNGER												
MALARIA AND VECTOR-BORNE												
MENINGITIS												
TOTAL					30	70	0	0				
INDUSTRY STRESS												
AGRICULTURE			-15	-35								
FISHERIES			15	55								
FORESTRY			-5	-15								
HYDRO ENERGY			-10	-30								
TOURISM			1	5								
TRANSPORT												
TOTAL			-14	-20								
CLIMATE TOTAL			-1,463	-4,438	30	70	4	8				
CARBON												
ENVIRONMENTAL DISASTERS												
OIL SANDS												
OIL SPILLS												
TOTAL			0	0								
HABITAT CHANGE												
BIODIVERSITY			850	2,500					85	250		
CORROSION												
WATER			50	65					1,750	1,500		
TOTAL			900	2565								
HEALTH IMPACT												
AIR POLLUTION					600	700	15	20				
INDOOR SMOKE					200	250	2	2				
OCCUPATIONAL HAZARDS					30	30	6	6				
SKIN CANCER					60	150	0	0				
TOTAL					890	1130	24	30				
INDUSTRY STRESS												
AGRICULTURE			45	80								
FISHERIES												
FORESTRY			35	70								
TOTAL			80	150								
CARBON TOTAL			980	2,715	890	1,130	24	30				

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)	