CLIMATE VULNERABILITY MONITOR

DARA

Climate Vulnerable Forum

COUNTRY PROFILE

SWEDEN

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: SWEDEN

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

	LOSSES PER YEAR	
CLIMATE CHANGE IMPACT	2010 **NIL**	2030 **NIL**
CARBON INTENSIVENESS IMPACT	2010 **0.4%GDP**	2030 **0.7%GDP**

HUMAN NATIONAL LOSS TOTALS: SWEDEN

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

	ADDITIONAL MORTALITY-YEARLY AVERAGE	
CLIMATE +CARBON COMBINED	2010 **2,000**	2030 **2,500**

	ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE	
CLIMATE	2010 **550,000**	2030 **650,000**
CARBON	2010 **35,000**	2030 **50,000**

FULL COUNTRY ASSESSMENT: SWEDEN

		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			5	10								
	FLOODS AND LANDSLIDES				1			0	0				
	STORMS			5	10			0	0				
	WILDFIRES												
	TOTAL			10	21	0	0	0	0				
	HABITAT CHANGE												
	BIODIVERSITY	-	-	400	950					-3,250	-6,500	30	80
	DESERTIFICATION												
	HEATING AND COOLING			-1,250	-3,250					-5,000	-9,000	-150	-300
	LABOUR PRODUCTIVITY			-300	-950					6	6		
	PERMAFROST			85	150			20	40				
	SEA-LEVEL RISE			150	300			0	0	5	10		
	WATER			-1,500	-4,500					-1	-1		
	TOTAL			-2,415	-7,300			20	40				
	HEALTH IMPACT												
	DIARRHEAL INFECTIONS					0	0	0					
	HEAT AND COLD ILLNESSES	-	-			45	90						
	HUNGER												
	MALARIA AND VECTOR-BORNE												
	MENINGITIS												
	TOTAL					45	90	0	0				
	INDUSTRY STRESS												
	AGRICULTURE			-20	-40								
	FISHERIES			10	25								
	FORESTRY			10	25								
	HYDRO ENERGY	-		40	-60								
	TOURISM			1	15								
	TRANSPORT												
	TOTAL			41	-35								
	CLIMATE TOTAL			**-2,364**	**-7,315**	**45**	**90**	**20**	**41**				
CARBON	**ENVIRONMENTAL DISASTERS**												
	OIL SANDS												
	OIL SPILLS												
	TOTAL			0	0								
	HABITAT CHANGE												
	BIODIVERSITY			1,000	3,250					75	250		
	CORROSION			1	1								
	WATER	-	-	60	80					1,750	1,500		
	TOTAL			1060.5	3330.5								
	HEALTH IMPACT												
	AIR POLLUTION	+	-			1,250	1,250	20	35				
	INDOOR SMOKE					400	500	4	5				
	OCCUPATIONAL HAZARDS	+	-			65	70	10	10				
	SKIN CANCER	+	+			150	350	0	1				
	TOTAL					1865	2170	35	52				
	INDUSTRY STRESS												
	AGRICULTURE	-		35	30								
	FISHERIES			1	1								
	FORESTRY			40	90								
	TOTAL			75.75	121								
	CARBON TOTAL			**1,135**	**3,451**	**1,865**	**2,170**	**35**	**52**				

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 (1000s)	
OIL SPILLS	Gallons oil spill (1000s)	
BIODIVERSITY	Decline in biological richness	
WATER	Volume of water to treat (millions m^3)	