CLIMATE VULNERABILITY MONITOR







COUNTRY PROFILE







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



2010 **0.6%**_{GDP} 2030 **1.2%**cpp



LOSSES PER YEAR

2010 **0.5%**_{GDP} 2030 **0.5%**_{GDB}



HUMAN NATIONAL LOSS TOTALS: TURKEY

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

ADDITIONAL MORTALITY-YEARLY AVERAGE



2010 **35,000**

2030 50,000

👀 CLIMATE

CARBON

ΔΠΠΙΤΙΠΝΙΔΙ

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE

2010 2,050,000 2030 3,400,000

2010 **750,000**

2030 1,150,000

FULL COUNTRY ASSESSMENT: TURKEY

			VULNERABILITY LEVEL			IONAL ALITY	ADDIT AFFE POPULATI	TONAL ECTED ON (1000s)	OTHER VALUE 1*		OTHER VALUE 2*		_				
			2010 2030	2010	2030	2010	2030	2010	2030	2010	2030	2010	2030	VULNERABIL	ITV I EVEL C		
		ENVIRONMENTAL DISASTERS															
	\sim	DROUGHT		35	65									+ Acute+	+ High		
		FLOODS AND LANDSLIDES		30	100	5	10	15	35					_ Acute-	- High		
	•	STORMS												- Severe+	Mode	erate	
		WILDFIRES		0=	405	_	4.0		0.5					- Severe-	Low		
		TOTAL		65	165	5	10	15	35					Severe	LOW		
		HABITAT CHANGE		4 500	. ==0								400				
		BIODIVERSITY		1,500	4,750			000	4.500	-4,750	-9,750	40	100		 + = Upper tier of vulnerability level - = Lower tier of vulnerability level 		
		DESERTIFICATION	+ +	350	950			600	1,500	6,250	15,000	4.750	0.750	- = Lowertier	of vulnerabili	y level	
		HEATING AND COOLING		-550 400	-1,250 1,250					-3,250 20	-5,250 14	-1,750	-2,750		_		
	9	LABOUR PRODUCTIVITY PERMAFROST		400	1,250					20	14			Environme	ental disasters		
		SEA-LEVEL RISE		300	750			0	1	55	85			=	Habitat change		
		WATER	+ +	1,750	5,500			U	'	10	20			\sim			
=		TOTAL		3,750	11,950			600	1,501	10	20			★ Health impact			
	i	HEALTH IMPACT		0,700	11,000			000	1,001					ndustry stress			
		DIARRHEAL INFECTIONS				25	15	0						_			
	$\overline{}$	HEAT AND COLD ILLNESSES				250	500							CLIMATE =	mpact // /ulpo	rabilitu	
		HUNGER				200	000								o Climate Ch		
		MALARIA AND VECTOR-BORNE												_			
		MENINGITIS				100	150	0	0					CARBON =	mpact/ vulne to Carbon Inte		
		TOTAL				375	665	0	0					,	.u Carburrinte	isiveriess	
		INDUSTRY STRESS												1	07:150	OT 150	
		AGRICULTURE		1,250	3,000										OTHER VALUE 1	OTHER VALUE 2	
	_	FISHERIES		400	1,250											WILDE Z	
		FORESTRY		5	20									- DIODII (EDGITI)	Contraction of biological	Decline in	
	w	HYDRO ENERGY	-	85	250									BIODIVERSITY	zones (km²)	biological richness	
		TOURISM			1										(cumulative)		
		TRANSPORT												DESERTI- Additional land degraded (km²)			
	'	TOTAL		1,740	4,521									FICATION	(cumulative)	,	
		CLIMATE TOTAL		5,555	16,636	380	675	616	1,536					HEATING &			
CARBON		ENVIRONMENTAL DISASTERS												COOLING	load (GWh)		
		OIL SANDS												-	Share of		
	\bigoplus	OIL SPILLS												LABOUR PRODUCTIVITY	workforce particularly		
		TOTAL		0	0									PRODUCTIVITY	affected (%)		
		HABITAT CHANGE													Net loss of		
		BIODIVERSITY		650	2,000					15	45			SEA-LEVEL RISE	land (km²)		
		CORROSION	+ -	10	20									- NISE	(cumulative)		
		WATER		5	5					150	250			WATER	Loss in water runoff 2030		
		TOTAL		665	2025									WATER	(km³)		
		HEALTH IMPACT															
	•	AIR POLLUTION	+ +			25,000	35,000	300	450					OIL SANDS	Tonnes toxic waste (1000s)		
		INDOOR SMOKE	-			9,500	15,000	400	650								
		OCCUPATIONAL HAZARDS				350	400	40	40					OIL SPILLS	Gallons oil		
		SKIN CANCER	-			100	250	0	0					012 01 1220	spill (1000s)		
	l i	TOTAL				34950	50650	740	1140					1	Decline in		
		INDUSTRY STRESS		EEO	4.000									BIODIVERSITY	biological richr	iess	
		AGRICULTURE	+	550	-1,000												
	W	FISHERIES FORESTRY	+ -	5 500	15 1.000									WATER	Volume of water to treat		
		TOTAL	+ -	1055	1,000									(millions m			
		CARBON TOTAL		1,720	2,040	34,950	50,650	740	1,140								
		CARBON TOTAL		1,720	2,040	34,930	30,030	740	1,140					i .			