

EX1//calculate the Gross Annual Methane Generation solid waste in a region their population (9344400), production of waste per day equal to 0.5 kg / person / Day , Fraction of MSW disposed to landfill 0.8, Methane correction factor=0.74 ,Fraction of Carbon releases as Methane=0.5 , DOC=0.21 , DOCf=0.77.

	A	B	C	D	E
	Population whose Waste goes to SWDSs (Urban or Total) (persons)	MSW Generation Rate (kg/capita/day)	Annual Amount of MSW Generated (Gg MSW)	Fraction of MSW Disposed to SWDSs (Urban or Total)	Total Annual MSW Disposed to SWDSs (Gg MSW)
			$C = (A \times B \times 365) / 1\,000\,000$		$E = (C \times D)$
1995	9344400	0.5	1705.35	0.8	1364.28

	STEP 1		STEP 2					STEP 3			STEP 4	
	A	B	C	D	E	F	G	H	J			
	Total	Methane	Fraction of	Fraction of	Fraction of	Conversion	Potential Methane	Realised	Gross			
	Annual MSW Disposed to SWDSs (Gg MSW)	Correction Factor (MCF)	DOC in MSW	DOC which Actually Degrades	Carbon Released as Methane	Ratio	Generation Rate per Unit of Waste (Gg CH ₄ /Gg MSW)	(Country-specific) Methane Generation Rate per Unit of Waste (Gg CH ₄ /Gg MSW)	Annual Methane Generation (Gg CH ₄)			
YEAR							$G = (C \times D \times E \times F)$	$H = (B \times G)$	$J = (H \times A)$			
1995	1364.2824	0.74	0.21	0.77	0.5	16/12	0.11	0.08	108.83			