



Task Force on National Greenhouse Gas Inventories

IPCC Inventory Software: Tools, Export/Import of Data and Reporting Tables

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Tools

- Reference Approach
 - Produce a first-order estimate of national greenhouse gas emissions based on the energy supplied to a country
- Uncertainty Analysis
 - Quantitative uncertainty analysis is performed by estimating the 95 percent confidence interval of the emissions and removals estimates for individual categories and for the total inventory
- Key Category Analysis
 - A key category is one that is prioritised within the national inventory system because its estimate has a significant influence on a country's total inventory of greenhouse gases in terms of the absolute level, the trend, or the uncertainty in emissions and removals

Uncertainty Analysis

The screenshot displays the IPCC software interface. The 'Tools' menu is open, showing options: Reference Approach, **Uncertainty Analysis**, and Key Category Analysis. A callout box points to 'Uncertainty Analysis' with the text 'Click "Uncertainty Analysis"'. Below, the 'Uncertainty Analysis - Approach 1 (Table 3.2)' window is shown. It features a table with columns for 2006 IPCC Categories, Gas, Base Year emissions or removals (Gg CO2 equivalent), Year T emissions or removals (Gg CO2 equivalent), and Activity Data Uncertainty (%). A callout box points to the 'Refresh Data' button with the text 'Click to perform analysis'. A bar chart at the bottom right shows data from 2002 to 2012.

2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO2 equivalent)	Year T emissions or removals (Gg CO2 equivalent)	Activity Data Uncertainty (%)
4.A - Solid Waste Disposal				
4.A.1 - Managed Waste Disposal Sites	CH4	3598.6	3705.4	3.0
4.B - Biological Treatment of Solid Waste				
4.B.1 - Composting	CH4	81.8	0.0	0.0
4.B.2 - Anaerobic Digestion	N2O	39.5	0.0	0.0
4.C - Incineration and Open Burning of Waste				
4.C.1 - Waste Incineration	CO2	1419.2	5601.4	4.0
	CH4	11.7	1.9	4.0
	N2O	0.0	480.1	4.0
4.C.2 - Open Burning of Waste	CO2	69.2	2203.1	4.0
	CH4	0.0	4.2	4.0
	N2O	1.0	34.1	4.0
4.D - Wastewater Treatment and Discharge				
4.D.1 - Domestic Wastewater Treatment and Discharge	CH4	5.0	0.1	5.0
	N2O	0.2	0.1	5.0



Uncertainty Analysis

The screenshot displays the IPCC software interface for uncertainty analysis. The main window shows the 'Parameters' tab for 'Methane Correction Factor' for 'Slovakia' in the 'Europe - Eastern' region, using a 'Waste by composition' approach and 'National data' activity data. The 'Starting year' is set to 1950, and the 'DOCf (fraction of DOC dissimilated)' is 0.500. A table of DOC values is shown for various waste types: Food Waste (0.150), Garden (0.200), Paper (0.400), Wood and straw (0.430), Textiles (0.240), Disposable nappies (0.240), Sewage sludge (0.050), and Industrial Waste (0.150).

An 'Uncertainties' dialog box is open, showing the 'Category' as '4.A - Solid Waste Disposal'. Under 'Activity Data Uncertainties', the 'Lower' bound is set to -3.00% and the 'Upper' bound is +3.00%. Under 'Emission Factors Uncertainties', the 'Gas' is 'METHANE (CH4)', with a 'Lower' bound of -2.00% and an 'Upper' bound of +2.00%.

A callout box with a purple arrow points to the 'Uncertainties' button in the main window, containing the text: 'Click to enter AD and EF uncertainties'.

Key Category Analysis

Application Database Inventory Year Worksheets Reports **Tools** Export/Import Administrate Window Help

2006 IPCC Categories

- 4.A - Solid Waste Disposal
 - 4.A.1 - Managed Waste Disposal Sites
 - 4.A.2 - Unmanaged Waste Disposal Sites
 - 4.A.3 - Uncategorised Waste Disposal Site
- 4.B - Biological Treatment of Solid Waste
- 4.C - Incineration and Open Burning of Waste
 - 4.C.1 - Waste Incineration
 - 4.C.2 - Open Burning of Waste
- 4.D - Wastewater Treatment and Discharge
 - 4.D.1 - Domestic Wastewater Treatment
 - 4.D.2 - Industrial Wastewater Treatment and Discharge
- 4.E - Other (please specify)
- 5 - Other
 - 5.A - Indirect N2O emissions from the atmosphere
 - 5.B - Other (please specify)

Parameters Methane Calculations Methane Recovery Results Long Term s

Worksheet

Sector: Waste
Category: Methane
Subcategory: 4.A - Solid Waste Disposal
Sheet: Results

Data

Year	Methane generated							Total	Methane	Methane
	Food (Gg)	Garden (Gg)	Paper (Gg)	Wood (Gg)	Textile (Gg)	Nappies (Gg)	Street cleaning (Gg)			
1950	0	0	0	0	0	0	0	0	0	0
1951	0.56846	0.02109	0.73922	0.13806	0.09562	0.01265	0.13753	7.81853	9.53118	9.53118
1952	1.10382	0.04115	1.44946	0.27339	0.1875	0.02469	0.26836	15.25575	18.60412	18.60412

Click "Key Category Analysis"

Approach 1: Level Assessment | Approach 1: Trend Assessment

IPCC Category code	IPCC Category	Greenhouse gas	1994 Ex.t (Gg CO2 Eq)	Ex.t (Gg CO2 Eq)	Lx,t	Cumulative Total of Column F
2.G	Other Product Manufacture and Use	SF6, PFCs	753201.6125	753201.6125	0.7747	0.7747
2.F.6	Other Applications (please specify)	HFCs, PFCs	70736	70736	0.07275	0.07445
1.A.1	Energy Industries - Solid Fuels	CARBON DIOXIDE (CO2)	29743.85	29743.85	0.03059	0.07804
2.F.5	Solvents	HFCs, PFCs	27420	27420	0.0282	0.0625
3.D.1	Harvested Wood Products	CARBON DIOXIDE (CO2)	-22505.91952	22505.91952	0.02315	0.92939
2.E	Electronics Industry	SF6, PFCs, HFCs and ot...	20600.3124	20600.3124	0.02119	0.95058

Click to perform analysis

Refresh Data | Export to Excel

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Export/Import of Data

- Export
 - Worksheet Data
 - CO₂ Equivalents
 - F-Gases Data
 - NAI Reporting Table
- Import
 - Worksheet Data
 - CO₂ Equivalents
 - F-Gases Data

Export of Data

The screenshot displays the IPCC 2006 software interface. The main window shows a data table for 'Methane generated' from 1950 to 2012. The table includes columns for 'Year', 'Food (Gg)', 'Garden (Gg)', 'Paper (Gg)', 'Wood (Gg)', 'Textile (Gg)', 'Methane recovery (Gg)', and 'Methane Emissions (Gg)'. A callout box points to the 'Export' button in the 'Export/Import' menu, with the text 'Click the data to export'.

An 'Export - Worksheet Data' dialog box is open, showing a tree view of '2006 IPCC Categories to export'. The '4 - Waste' category is expanded, and sub-categories 4.A, 4.B, 4.C, and 4.D are checked. A callout box points to the '4.A' category, with the text 'Select categories to export data (XML file)'. The 'Export' button at the bottom of the dialog is highlighted.

In the background, a bar chart titled 'METHANE (CH4) Emissions (Gg CO2 Equivalents)' shows emissions from 1994 to 2012. The x-axis is labeled 'trend: 1990'.

Import of Data

The screenshot displays the IPCC software interface. The main window shows a table of methane emissions data from 1950 to 2012. The table has columns for various waste categories (Food, Garden, Paper, Wood, Textiles, Nappies, Sludge, Industrial, Total) and rows for each year. A callout box points to the 'Import' option in the 'Export/Import' menu.

An 'Import - Worksheet Data' dialog box is open, showing fields for 'XML import file', 'XML import version', 'Source inventory year', and 'Number of records'. A callout box points to the 'Open...' button in this dialog.

At the bottom of the interface, a bar chart titled 'METHANE (CH4) Emissions (Gg CO2 Equivalents)' shows the total methane emissions from 1950 to 2012. The x-axis represents the year, and the y-axis represents the emissions in Gg CO2 Equivalents. The chart shows a steady increase in emissions over time.

Reporting Tables

The screenshot displays the IPCC reporting software interface. The 'Reports' menu is highlighted, showing options for 'Summary', 'Short Summary', 'Energy', 'IPPU', 'Waste', and 'Sectoral'. A callout box points to the 'Reports' menu with the text 'Click "Reports"'. The main window shows a table of methane generated from 1950 to 2012, with columns for various sectors and total emissions. A detailed view of the 'Table 4 WASTE Sectoral Table' is shown below, listing categories and their emissions in Gg for CO2, CH4, N2O, NOx, CO, NMVOCs (1), and SO2. The 'Export to Excel' button is also highlighted.

Categories	Emissions [Gg]						
	CO2	CH4	N2O	NOx	CO	NMVOCs (1)	SO2
4 - Waste	7704.540	177.341	1.659	0.000	0.000	0.000	0.000
4.A - Solid Waste Disposal	0.000	176.446	0.000	0.000	0.000	0.000	0.000
4.A.1 - Managed Waste Disposal Sites				0.000	0.000	0.000	0.000
4.A.2 - Unmanaged Waste Disposal Sites				0.000	0.000	0.000	0.000
4.A.3 - Uncategorised Waste Disposal Sites				0.000	0.000	0.000	0.000
4.B - Biological Treatment of Solid Waste		0.000	0.000	0.000	0.000	0.000	0.000
4.C - Incineration and Open Burning of Waste	7704.540	0.289	1.659	0.000	0.000	0.000	0.000
4.C.1 - Waste Incineration	5501.401	0.089	1.549	0.000	0.000	0.000	0.000
4.C.2 - Open Burning of Waste	2203.140	0.200	0.110	0.000	0.000	0.000	0.000
4.D - Wastewater Treatment and Discharge	0.000	0.606	0.000	0.000	0.000	0.000	0.000
4.D.1 - Domestic Wastewater Treatment and Discharge		0.003	0.000	0.000	0.000	0.000	0.000
4.D.2 - Industrial Wastewater Treatment and Discharge		0.603	0.000	0.000	0.000	0.000	0.000
4.E - Other (please specify)				0.000	0.000	0.000	0.000



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Thank you

IPCC Inventory Software can be downloaded from
<http://www.ipcc-nggip.iges.or.jp/software/index.html>