

FACILITATIVE SHARING OF VIEWS – BOSNIA AND HERZEGOVINA

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Presentation outline

Part I: Summary of BUR and recent development

- ❖ National context
- ❖ GHG inventory
- ❖ Mitigation actions and effect
- ❖ Barriers and support needed and received

Part II: Experience and lessons learned in participating in the ICA process

- ❖ Has participation in the ICA process raised the profile of climate actions at the domestic level?
- ❖ Has the BUR preparation enhanced domestic coordination/ domestic MRV in providing climate related information? If so, how?
- ❖ What's the value addition of the technical analysis of BURs by the team of technical experts?
- ❖ Has the ICA process supported the country to identify capacity building needs?
- ❖ Did the technical analysis supported the country to facilitate its reporting?

Part III: Response to questions received

Part I: Summary of BUR and recent development

National context

Institutional arrangements

BiH has prepared and submitted three national communications and two biennial update reports as follows:

- ❖ FNC 1990, adopted in 2010,
- ❖ SNC 1991-2001, adopted in 2013,
- ❖ FBUR 2010-2011, adopted in 2015,
- ❖ TNC and SBUR , 2002-2009, 2012,2013, 2014, adopted in 2017

BUR preparation:

The project “Bosnia and Herzegovina’s Third National Communication under the UNFCCC” was developed and implemented by UNDP in B&H in partnership with Ministry for Spatial Planning, Construction and Ecology of Republic of Srpska as focal point institution for the UNFCCC convention.

National context

Institutional arrangements

The Project engaged 48 local experts, most of them employed by relevant public institutions in Bosnia and Herzegovina:

- ❖ Hydrometeorological institutes (listed as authors of TNC and SBUR)
- ❖ Statistical offices
- ❖ Faculties of mechanical engineering and faculties of natural science
- ❖ Power utilities of RS and B&H
- ❖ Individual experts

Bosnia and Herzegovina adopted SBUR by the Council of Ministers of Bosnia and Herzegovina on 23.05.2017 and submitted its second BUR on 13 June 2017.

National context

National circumstances

- ❖ BIH decentralized country

On climate change the corresponding authorities at the level of entities and

Brčko District are as follows:

- ❖ Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina (MOFTER) - coordinating activities and for international relations
- ❖ Ministry of Environment and Tourism of Federation of B&H
- ❖ Ministry of Spatial Planning, Civil Engineering and Ecology of Republic of Srpska (UNFCCC National Focal Point),
- ❖ Department for Communal Works of Brčko District (BD).

GHG inventory

Guideline

UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention pursuant to CP Decision 17 (2/CP.17, Annex III, section 3).

- ❖ GHG inventory
- ❖ Mitigation actions
- ❖ Monitoring, reporting, verification process

GHG Inventory

Methodology

- ❖ Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories
- ❖ Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories and Good Practice Guidance for LULUCF
- ❖ Inventory Software (NAAIS), developed by the UNFCCC Secretariat for Parties not included in Annex I to the Convention
- ❖ Tier 1 methodology
- ❖ NCV for coals, country specific
- ❖ Default EF

GHG Inventory

Activity data

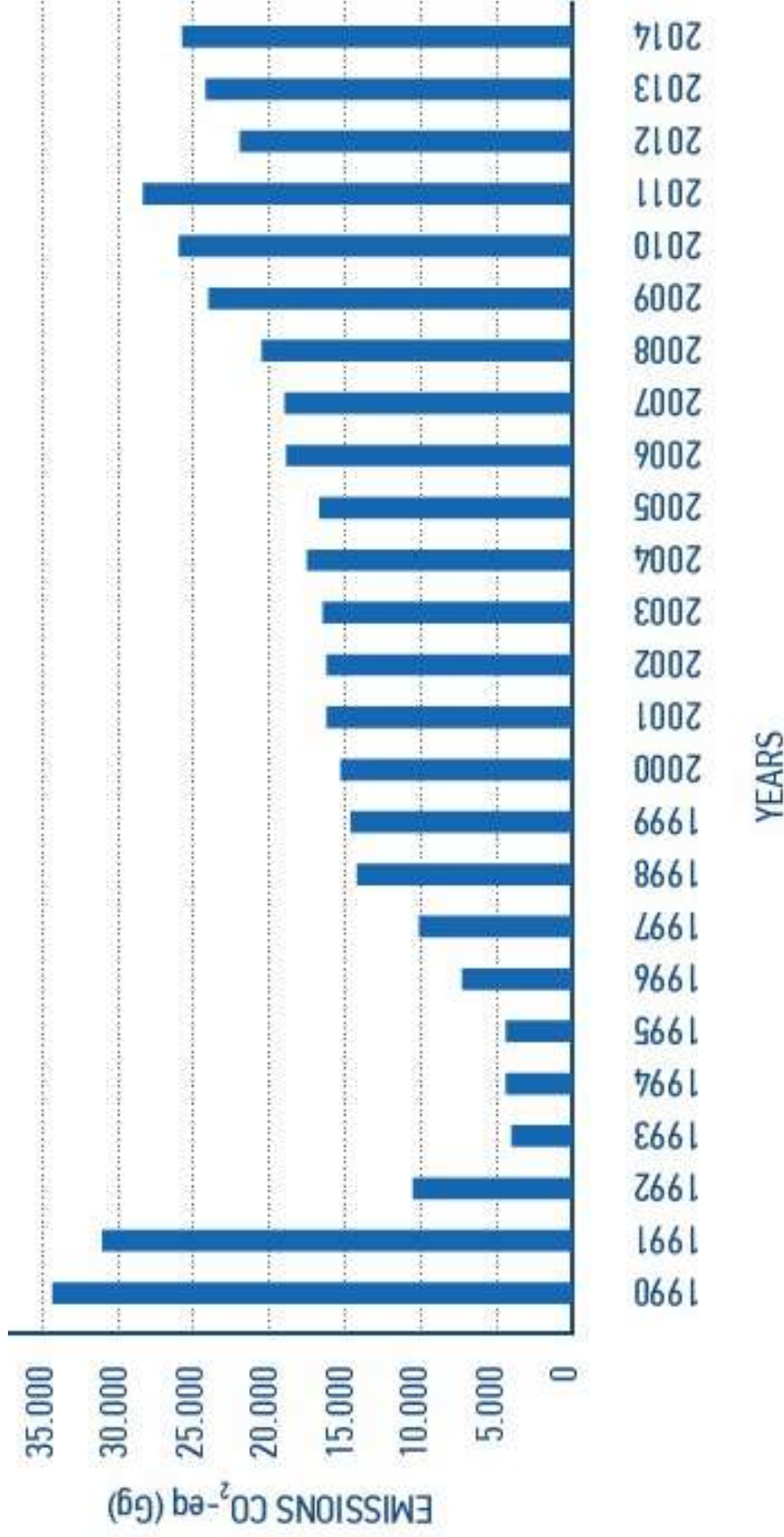
- ❖ Inventory year 2014 (time series 1990-2014)
- ❖ Continuation of the time series from TNC (2002-2009 and 2012-2013)
- ❖ GHG emissions and removals by sector and by gas covering the energy, industrial process, agriculture, land-use change and forestry (LULUCF) and waste sector
- ❖ Emissions of: CO₂, CH₄, N₂O and indirect GHGs (SO₂, CO, NO_x and NMVOC)
- ❖ Data providers, official statistical publications, questionnaires, sectoral development strategies (energy, agriculture etc.), approved projects, public papers, expert judgement
- ❖ National energy balance, 2014

GHG Inventory

Total emissions of CO₂ eq (Gg)

1990: 34,043.49 GgCO₂e (excluding LUCF); 26,619.9 GgCO₂e (including LUCF)

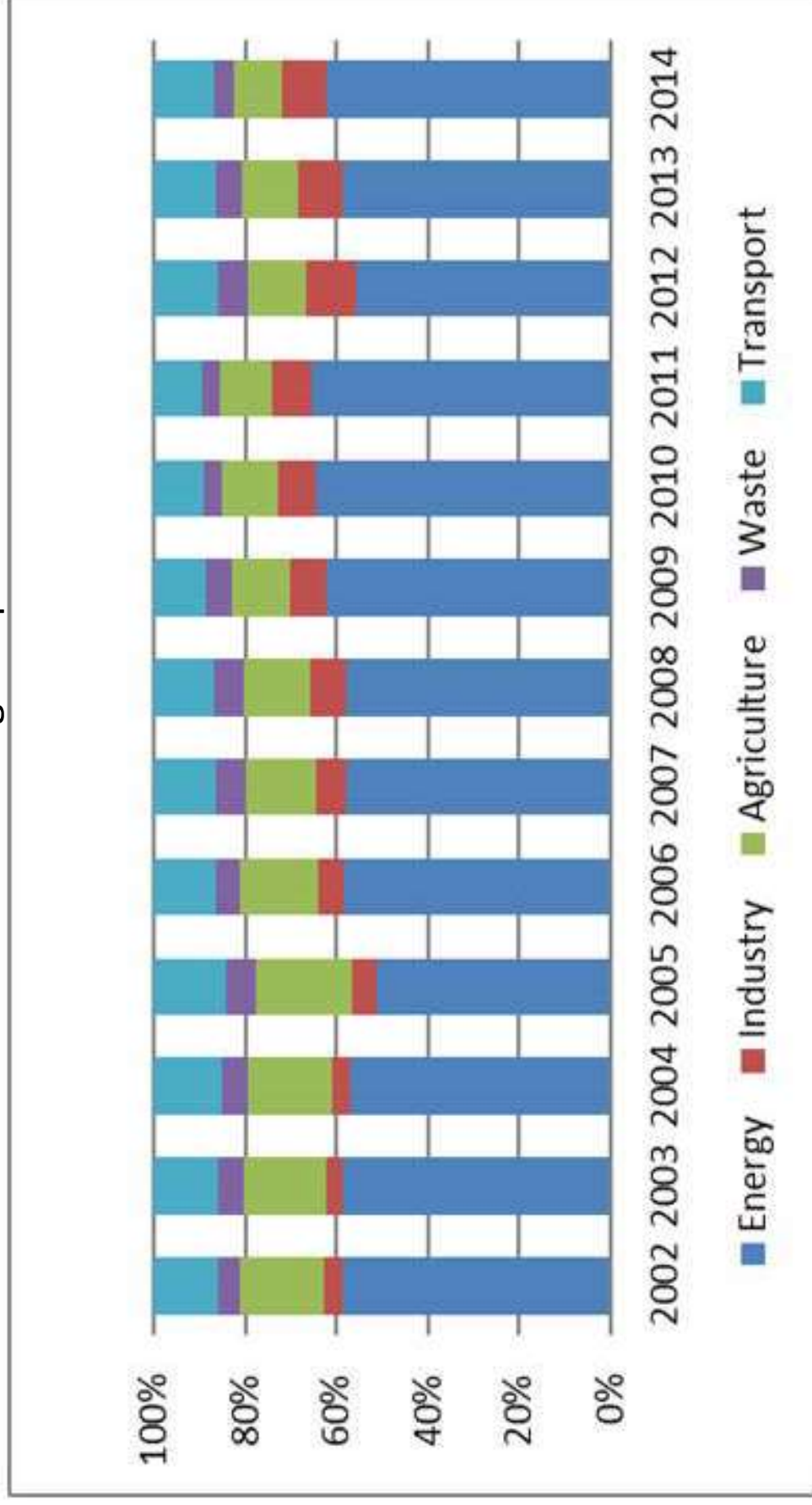
2014: 26,062.18 GgCO₂e (excluding LUCF); 19,664.51 GgCO₂e (including LUCF); 76.5%



GHG Inventory

Share of each sector in total emissions of CO₂eq (Gg)

The most significant source of CO₂ emissions is the energy sector which contributed with about 53% of total CO₂ emissions, followed by agriculture (14%), industrial processes (6%) and waste (5%). The share of emissions from other sectors in the total emissions during this period is about 22%.



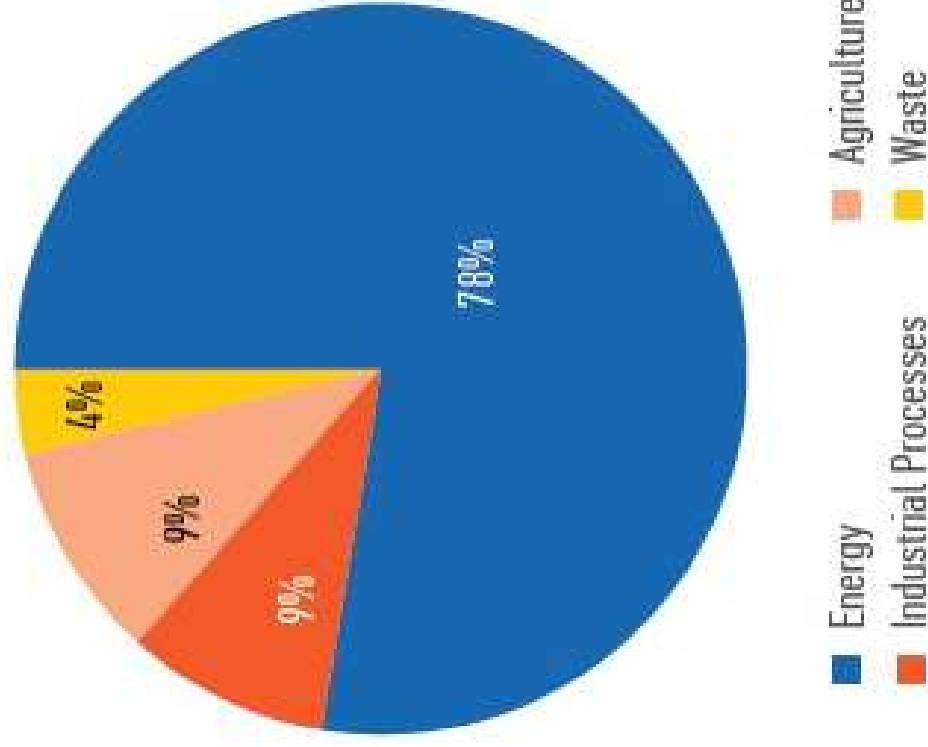
GHG Inventory

Share of each sector in total emissions of CO₂eq (Gg) in 2014

2014:

Total emissions: 26,062.18 Gg CO₂eq
21,711.93 Gg CO₂
119.96 Gg CH₄
5.91 Gg N₂O

Energy sector: 19,734.33 Gg CO₂ eq
Industrial process: 2,247.36 Gg CO₂ eq
Agriculture 2,453.00 Gg CO₂ eq
Waste: 966.00 Gg CO₂ eq
LULUCF: 6,398.00 Gg CO₂ eq



GHG Inventory

Key category analysis

Key category 2014	Gas	CO ₂ e (Gg)	Level assessment (%)	Cumulative total (%)
1A1 Energy Industries	CO ₂	14480,94	57	57
1A3b Road Transportation	CO ₂	3053,20	12	69
2C1 Metal Production	CO ₂	1459,50	6	75
1A4 Other sectors	CO ₂	1240,72	5	80
4D Agricultural Soils	N ₂ O	1240,00	5	85
1A2 Manufacturing Industries and Construction	CO ₂	857,03	3	88
4A Enteric Fermentation	CH ₄	798,00	3	91
6A Solid Waste Disposal on Land	CH ₄	735,00	3	94
2A1 Cement production	CO ₂	728,10	3	97

GHG Inventory

Uncertainty analysis

Estimated uncertainty in the calculation of CO₂ emissions for 2014

Source category / GHG	Uncertainty of activity data (%)	Uncertainty of emission factors (%)	Total uncertainty (%)
Fuel combustion – coal, CO ₂	±8	±6	±10
Fuel combustion – liquid fuels, CO ₂	±12	±5	±13
Fuel combustion – natural gas, CO ₂	±5	±5	±7

The estimated uncertainty of emissions from individual sources is a combination of the individual uncertainties of two elements of emission calculations:

- ❖ Uncertainties associated with emission factors (from published references or measurements); and
- ❖ Uncertainties associated with activity data.

Mitigation actions and effects

Mitigation actions

- ❖ Sectors
electricity generation, district heating, buildings, transport, waste management, agriculture, and forestry
- ❖ Mitigation scenarios developed until 2040
- ❖ 25 measures identified and proposed
- ❖ Specific modeling involved a quantitative evaluation of time-series
- ❖ GHG emissions and considered taking into account three development scenarios:
 - S1 – a baseline scenario (“business as usual”),
 - S2 – a scenario that assumed partial implementation of mitigation actions (moderate)
 - S3 – an advanced scenario that assumed the implementation of a comprehensive set of mitigation actions (advanced)