

Best Practices in Coal Mine Methane Monitoring, Capture, and Use

*„Status of coal mine methane
in Bosnia and Herzegovina “*

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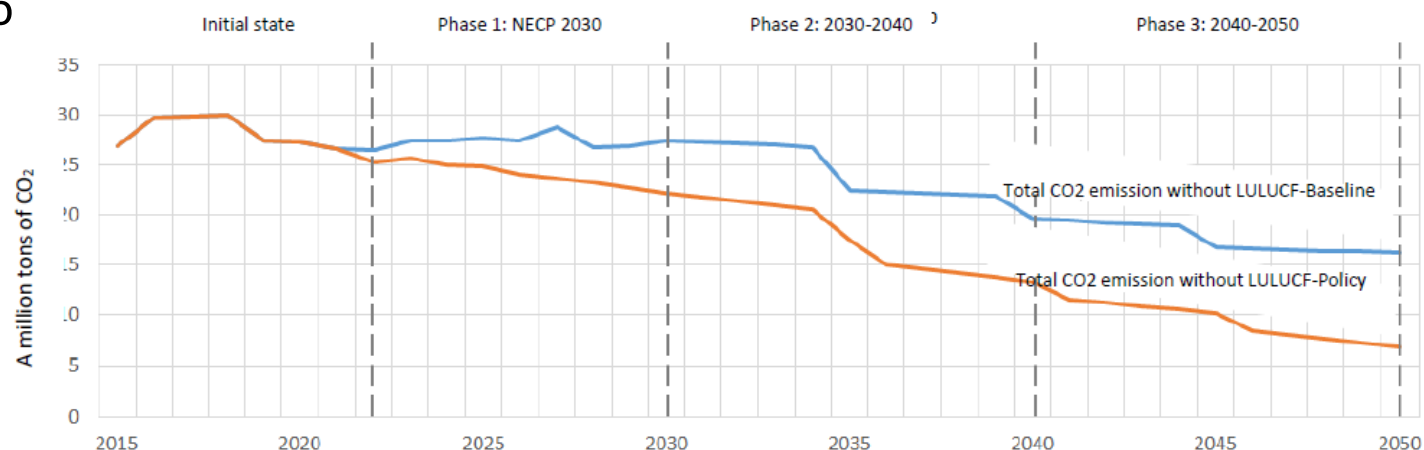
Bosnia and Herzegovina Strategic Commitment



Strategic Framework in Bosnia and Herzegovina

- Environmental Strategy and Action Plan for Bosnia and Herzegovina 2030+ (BiH ESAP 2030+)
- Integrated Energy and Climate plan of Bosnia and Herzegovina (**NECP**) – The first phase of decarbonization by 2030, ultimately leading to carbon neutrality by 2050.
- LTS
- Roadmap for Just Transition in Coal-Rich Regions in BiH
- Nationally Determined Contributions (**NDC**) – update to align with the NECP
- BiH Third Biennial Update Report on GHG Emissions (**TBUR**) - 2017 and 2018
- National Communication of Bosnia and Herzegovina
- Biennial Transparency Report (BTR)
- BiH Plan for Short-Lived Climate Pollutants, the BiH Roadmap for Methane

GHG including (LULUCF)	(RES)	(PEC)	(FEC)
15.65 MtCo2	43.62%	6.84 Mtoe	4.34 Mtoe
41,2% (1990)			



NDC	Unconditional Target	Conditional Target
GHG Reduction by 2030	33,2% (1990)	36,8% (1990)
GHG Reduction by 2050	61,7% (1990)	65,6% (1990)

Strategic Framework in Bosnia and Herzegovina

NECP

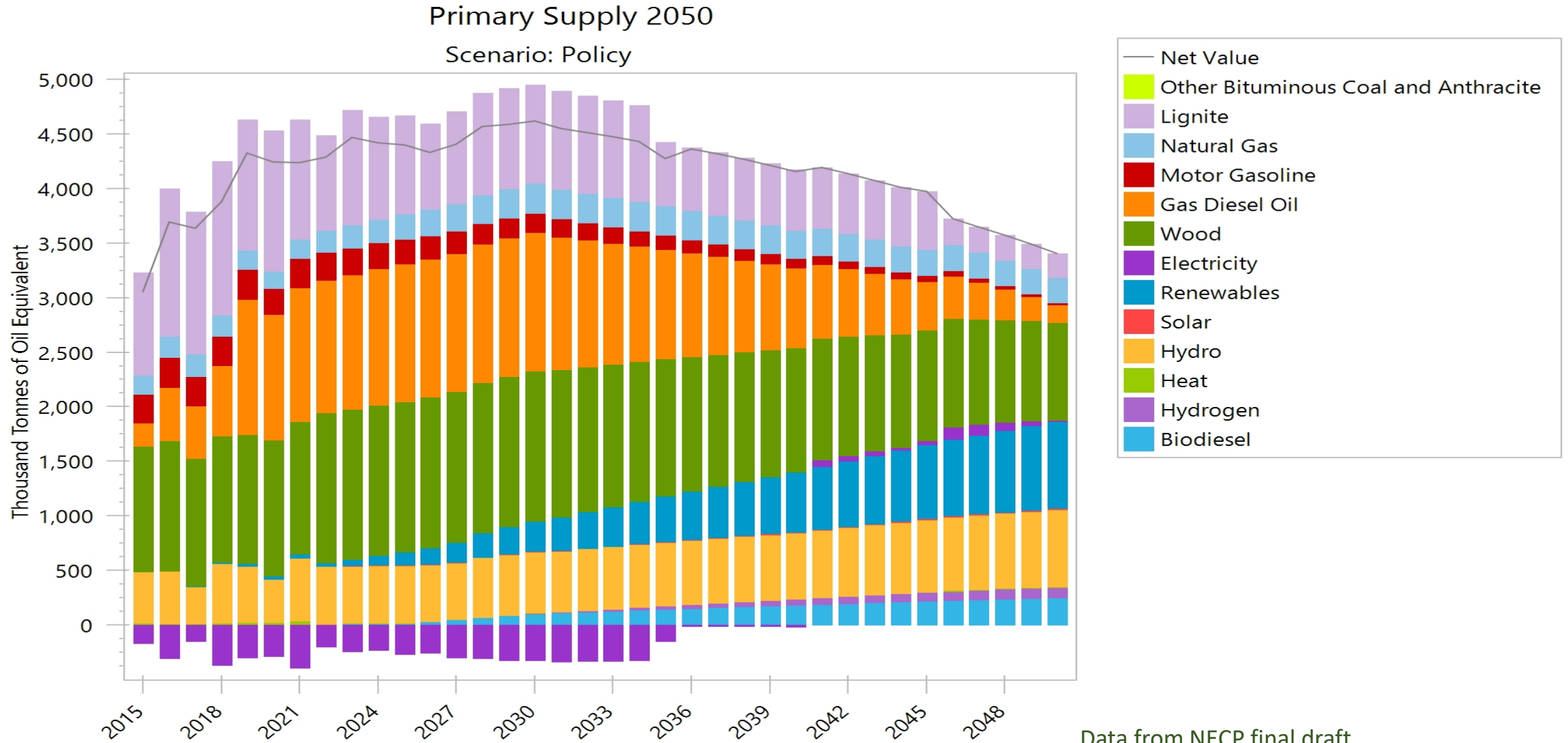
Policies and measures:

- ✓ Reduction of short-lived climate pollutants emissions in Bosnia and Herzegovina
- ✓ Development and adoption of a plan for short-lived climate pollutants in Bosnia and Herzegovina
- ✓ Establishment of an MRV system for short-lived pollutants emissions

NDC/TBUR

- ✓ In setting GHG emission reduction target, the following GHGs were considered: carbon dioxide, methane, nitrous oxide and hydrofluorocarbons.
- ✓ **The main sources of methane** in Bosnia and Herzegovina are **agriculture** (enteric fermentation and manure management), **fugitive emissions from coalmines**, and **waste disposal**.
- ✓ Since 2006, methane emissions have not changed significantly (1,006.97 Gg CO₂eq in 2017, and 1991.32 Gg CO₂eq in 2018.)

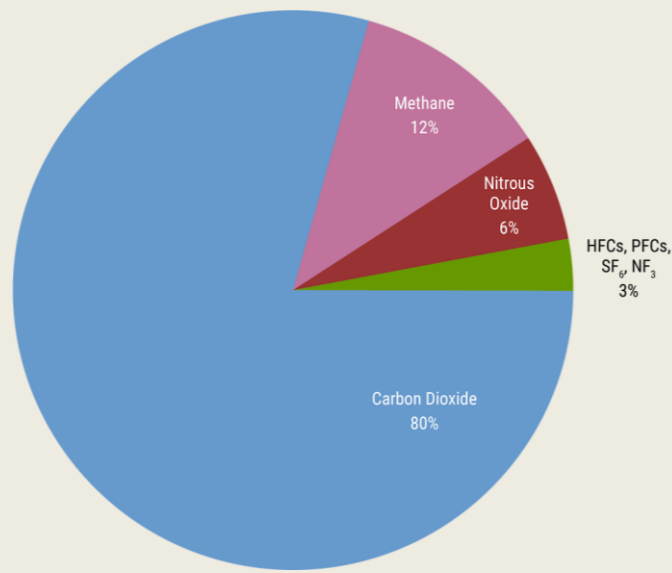
Energy Mix in Bosnia and Herzegovina



Project “Accelerating implementation of coal mine methane mitigation measures”



**CLIMATE &
CLEAN AIR
COALITION**
TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS



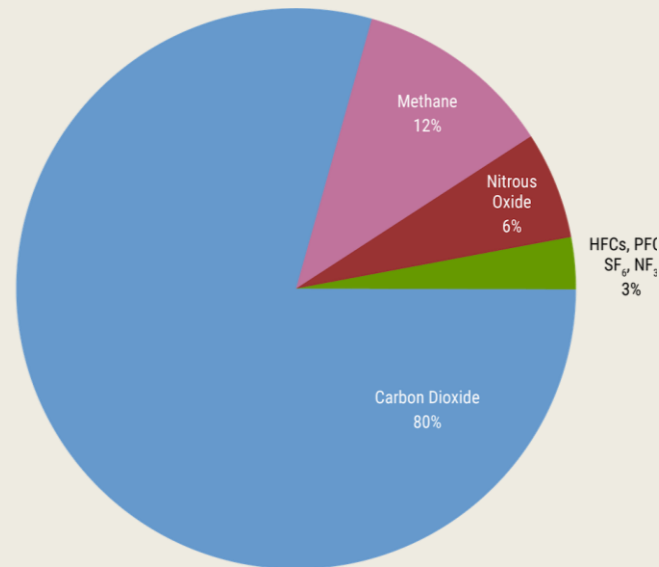
- BiH joined the Climate and Clean Air Coalition (CCAC) in **2023**
- **Financed by:** Climate and Clean Air Coalition (CCAC)
- **Implemented by:** Clean Air Task Force (CATF)
- **Project objectives:**
 - Provide technical assistance to identify finance sources for the implementation of coal mine methane reduction plans, to update mine project concept documents:
 - **Breza Coal Mines:** Breza Mine VAM Abatement Project (Kamenice and Sretno mines)
 - **Zenica Coal Mines:** Zenica Raspotocje VAM Abatement Project (Raspotocje Mine); Zenica Stara jama VAM Abatement Project (Stara jama Mine) and Zenica Stranjani VAM Abatement Project (Stranjani Mine)
 - Present current options for methane abatement, and incorporate them into an overall CMM Emissions Roadmap for BiH

Project "Development of the BiH Plan for Short-Lived Climate Pollutants, the BiH Roadmap for Methane, and the Framework for Monitoring, Reporting, and Verification of Short-Lived Pollutants Emissions in BiH."



**CLIMATE &
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- **Financed by:** United Nations Environment (UNEP)
- **Coordinated by:** Climate and Clean Air Coalition (CCAC)
- **Implemented by:** People in Need (PIN), Center for Energy, Energy Efficiency and Environment (CEEEO) and the Association for Environmental Protection and Tourism Promotion (STEP).



- Project objectives:
 - Plan for reducing short-lived climate pollutants in BiH (SLCP plan)
 - Roadmap for methane in BiH
 - Framework for monitoring, reporting, and verification of short-lived pollutants emissions in BiH
 - Integration into NECP and NDC
 - Strengthening the capacities of institutions in BiH

Key Challenges and Opportunities

- ✓ **Economic Dependence on Coal:** Coal is central to BiH's energy supply (over 50%), providing jobs for 16,000+ people and essential for energy security, making a shift challenging
- ✓ **Financial Constraints:** Transition requires significant investment (but is hindered by limited access to international finance and high costs).
- ✓ **Aging Infrastructure:** Most coal plants date back to the 1960s-1980s, needing major upgrades to meet EU standards and reduce emissions.
- ✓ **Social and Employment Impact:** Dependence on coal jobs, limited diversification, and community resistance present social challenges.
- ✓ **Energy Security Risks:** Transition to RES raises concerns about grid stability, potential price increases, and reliance on imports.
- ✓ **Public and Political Will:** Limited public awareness and political complexity require robust strategies to align with EU standards and gain support for transition efforts.

Main Recommendations and Next Steps

- ✓ **Developing a Comprehensive Methane Reduction Action Plan:** Integrated into BiH's national energy and climate policies, with clear, time-bound targets.
- ✓ **Implementing Methane Capture Technologies:** Use advanced capture technologies suited to BiH's mining conditions.
- ✓ **Improving Data Collection and Reporting:** Enhance monitoring systems and create a centralized methane emissions database.
- ✓ **Leveraging International Support:** Seek funding, technology, and expertise from EU and international organizations.
- ✓ **Increasing Public Awareness and Institutional Capacity:** Educate the public on methane's environmental impact and bolster institutional capabilities
- ✓ **Aligning with EU Directives:** Meet EU emissions standards and prepare for CBAM
- ✓ **Transitioning to Renewable Energy:** Set RES targets and modernize infrastructure for vRES

**THERE IS
NO
PLANET B**



Thank you!



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Projects

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