POLICY BRIEF

DECARBONISING KAZAKHSTAN: WHAT FUTURE AWAIT MINING REGIONS AND TOWNS?

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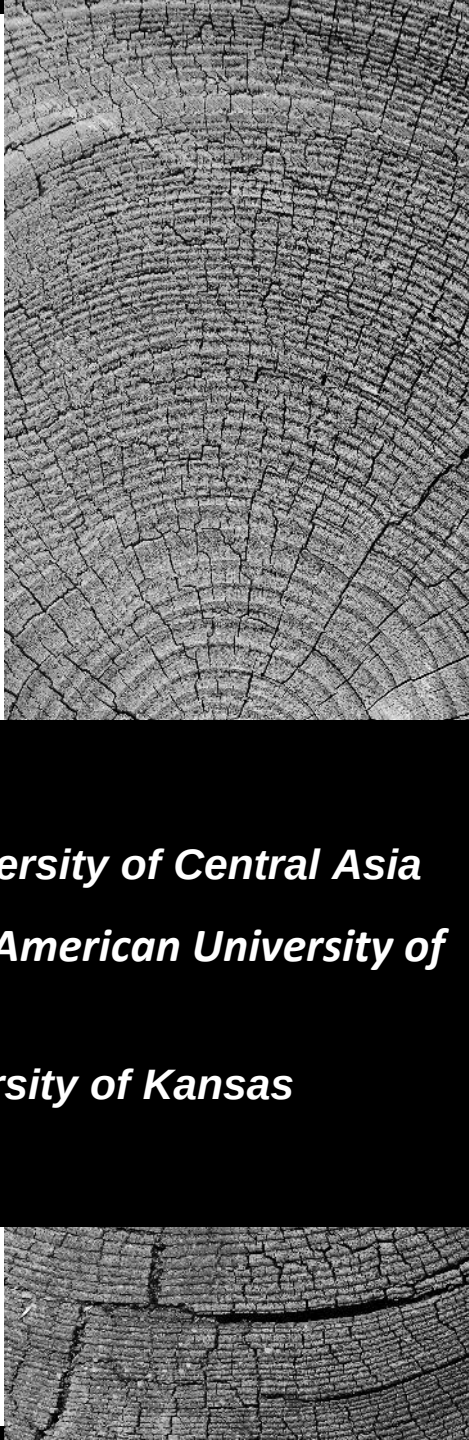
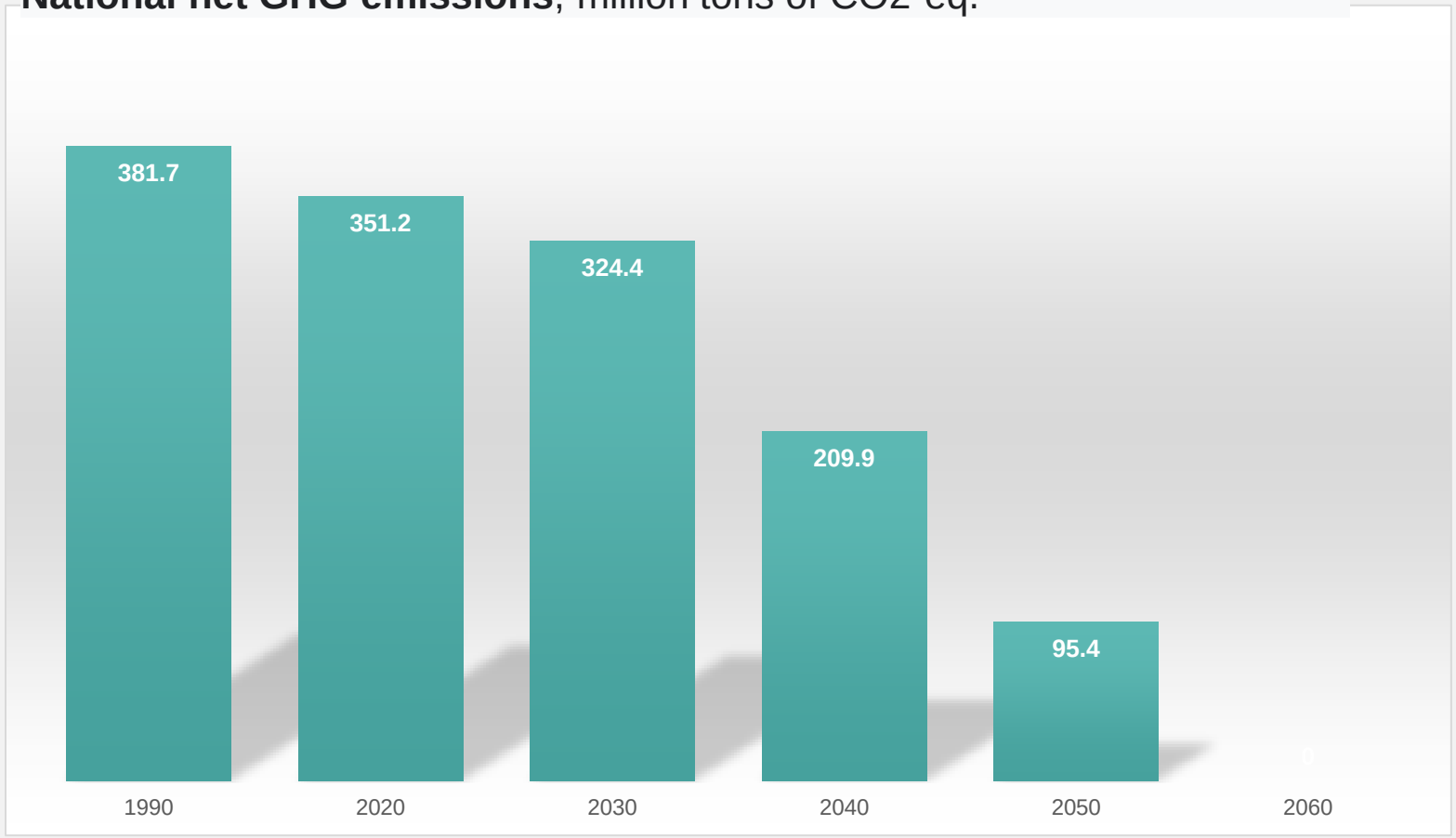


STATE STRATEGY

FOR ACHIEVING CARBON NEUTRALITY IN THE REPUBLIC OF KAZAKHSTAN UNTIL 2060 (ISSUED ON FEBRUARY 2, 2023)

STATED GOALS:

National net GHG emissions, million tons of CO2-eq.

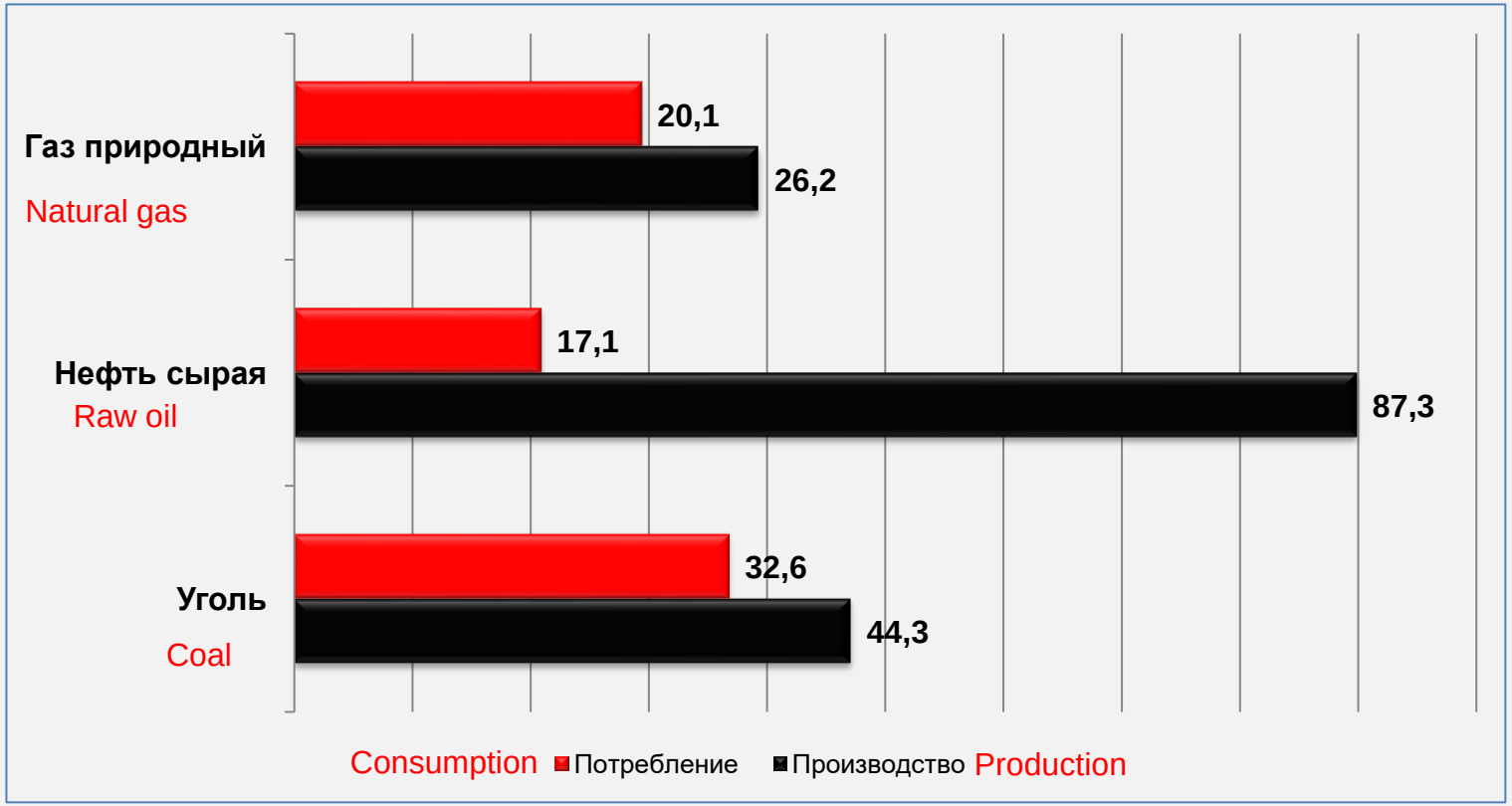


STATE STRATEGY

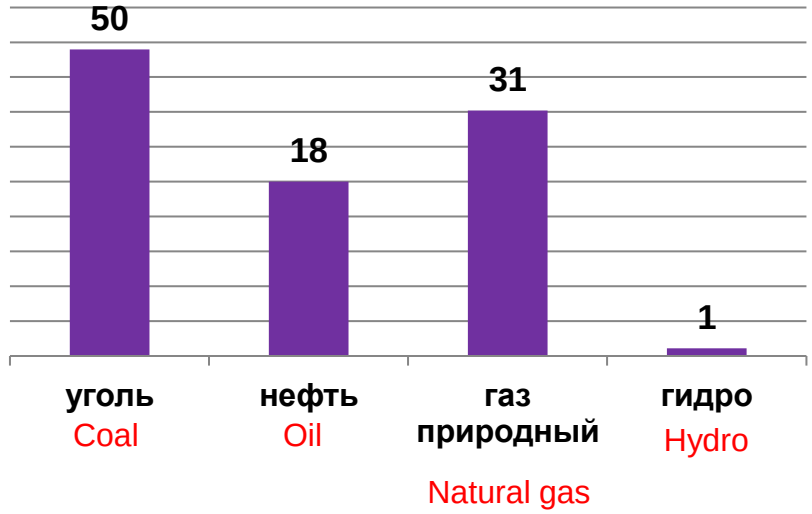
FOR ACHIEVING CARBON NEUTRALITY IN THE REPUBLIC OF KAZAKHSTAN UNTIL 2060 (ISSUED ON FEBRUARY 2, 2023)

CURRENT REALITY:

Gross Consumption and Production of Fuel and Energy Resources, %.



Structure of Gross Consumption of Fuel and Energy Resources in 2020, %



IMPACT

To achieve carbon neutrality, the decarbonisation strategy proposes switching from use of coal to gas in the power sector.

TWO CASE STUDIES:

Ekibastuz

Ekibastuz is the centre for coal extraction, providing thermal and energy supply to the country with outdated and ineffective coal-based heating infrastructure. The public became angry after the cut-off of the heating due to the power plant failure in December 2022.

Janaozen

Janaozen, an oil and gas extraction site and a critical node in the country's gasification efforts. In 2011 and 2022, there were violent social protests due to wage inequality and increased gas prices.

Kazakhstan’s decarbonisation strategy pursues the reduction of carbon resource extraction while ensuring social equity. **HOWEVER,** the document lacks an analysis and assessment of the potential consequences of reducing extraction volumes on the mining regions and towns.

STATE STRATEGY

FOR ACHIEVING CARBON NEUTRALITY IN THE REPUBLIC OF KAZAKHSTAN UNTIL 2060 (ISSUED ON FEBRUARY 2, 2023)

In the absence of a viable regional policy and adequate preparation for transitioning mining regions and towns to a decarbonised country, achieving carbon neutrality will significantly impact the economic and social situation in Kazakhstan.

There is **no clear vision** on how to implement the strategy and ensure sustainable development of the mining regions and towns in Kazakhstan.

Immediate research and systematic exploration of **alternative futures** and ways to create them is needed for the mining regions and towns of Kazakhstan.

REGIONAL POLICY

METHODOLOGY

Policy Review & Expert Interviews

List of Interviewed Experts

№	Expert and Area of Interests	Organization	Gender	Interview Date	City and Country of Residence
1	Decarbonization Strategy Analyst and Developer	Ministry of National Economy	Male	March 2023 (Zoom)	Astana, Kazakhstan
2	Urban Development Researcher	Ministry of Science and Education	Female	March 2023 (Zoom)	Almaty, Kazakhstan
3	Regional Policy Analyst and Developer	Ministry of National Economy	Male	April 2023 (Zoom)	Astana, Kazakhstan
4	Regional Development Analyst and Researcher	Ministry of National Economy	Male	April 2023 (Zoom)	Astana, Kazakhstan
5	Urban and Regional Development Analyst	Non-governmental organization	Male	April 2023 (Zoom)	Astana, Kazakhstan
6	Energy Modelling Analyst	International consulting agency specializing in...	Female	May 2023 (Zoom)	Montreal, Canada

POLICY OPTIONS: THREE SCENARIOS

Zero Scenario: Decarbonisation strategy is not implemented

Expert interviews revealed that decision-makers at the national and local levels of government in Kazakhstan lack a clear and unified understanding of the necessity of decarbonisation in the country. Moreover, there is significant scepticism about the feasibility of implementing the decarbonisation strategy.

Rapid Transition Scenario: Active top-down implementation of decarbonisation without regional policy adaptation.

The second scenario involves the active implementation of the decarbonisation strategy as planned "from the top-down," but without supporting reforms in the country's regional policy. In its decarbonisation strategy, the national company "Samruk Kazyna" assesses several development scenarios and proposes to focus on extreme decarbonisation scenario.

Slow Transition Scenario: Decarbonisation strategy is incrementally implemented through strengthened regional policy with attention to social justice.

The third scenario involves the implementation of the decarbonisation strategy through strengthening regional policy and directing it towards resource decentralisation, increasing the role of local governance to engage the local population and businesses in the process of economic diversification and improving the quality of life in mining (and other) regions and towns of the country.

COMPARISON OF POLICY OPTIONS: ECONOMIC IMPACT

Zero Scenario	Rapid Transition Scenario	Slow Transition Scenario
• Economic growth rates in mining regions are maintained. Development remains concentrated in narrow industries with a dependency on extractive enterprises. • Regional inequality continues to grow. • The informal sector in the economy continues to expand. • Private business experiences limited growth. • Economic diversification remains at a low level.	• Economic crisis in mining cities and regions due to bankruptcy and closure of enterprises. • Sharp increase in development disparities between regions of the country. • Preservation of natural resource reserves for future generations.	• Transitioning mining enterprises into the green economy sector. • Diversification of the economy by stimulating the development of knowledge-intensive and innovative projects. • Improving the business climate and providing financial support to local businesses and startups. • Preserving natural resource reserves for future generations. • Gradual alignment of regional development.

COMPARISON OF POLICY OPTIONS: SOCIAL IMPACT

Zero Scenario	Rapid Transition Scenario	Slow Transition Scenario
• There is a slight reduction in employment in the mining industry due to optimization and digitalization. • Poverty continues to rise in both mining and small towns. • Rapid deterioration of communal and housing infrastructure with the potential for recurring technological accidents and disasters. • Population outflow from small towns.	• Sharp increase in unemployment and poverty. • Active migration from former mining regions to major cities. • Energy poverty due to financial inability to access gas. • Extreme growth in social tension, protests by the population.	• Enhancing the qualifications of the population to increase earning levels or foster entrepreneurship. • Improving the well-being of the population and reducing poverty. • Reducing youth outmigration. • Alleviating social tension through dialogue and engaging the population in development planning.

COMPARISON OF POLICY OPTIONS: ECOLOGICAL IMPACT

Zero Scenario	Rapid Transition Scenario	Slow Transition Scenario
• Deterioration of the environment in mining regions and towns. • Depletion of mineral resources and irreversible geological processes. • Worsening of public health. • Increased negative impact from climate change, water scarcity, prolonged droughts, dust storms, and soil salinization.	• Partial improvement in the environment due to reduced mining and emissions. • Slow but gradual restoration of the natural environment. • Partial mitigation of the negative impact of climate change.	• Significantly improving the environment. • Enhancing public health. • Mitigating the negative impact of climate change through the application of an ecosystem approach, reclamation, agrarian purification, and greening of areas affected by extractive industries.

POLICY RECOMMENDATIONS

CONDITION

If the national government wants to secure the support of society in achieving carbon neutrality, it is necessary to conduct a nationwide informational campaign to improve awareness and engage the authorities, businesses, and population in cross-sectoral and inter-level dialogues for developing regional policies aimed at socially just strategy implementation.

Step 1: Initiate awareness raising and capacity building

Step 2: Establish dialogue with key stakeholders

Step 3: Engage education and research institutions

POLICY RECOMMENDATIONS

CONDITION

If the state wants to develop strong regions and cities, a well-designed strategy for administrative, fiscal, and political decentralisation is needed. This process involves both strengthening the role of local authorities and their direct accountability to their populations, as well as improving legislation to address conflicts and inefficiencies that hinder effective interactions between national, regional, and local levels of governance.

Step 4: Empower local governments

Step 5: Engage local stakeholder in strategic joint actions

Step 6: Improve rules and efficiency of public investment

POLICY RECOMMENDATIONS

CONDITION

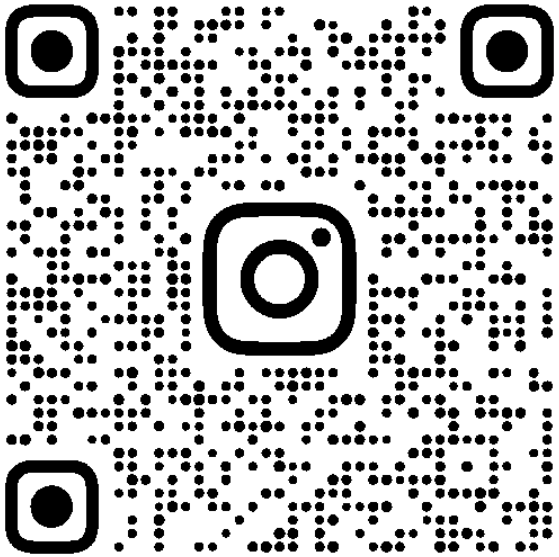
If the state aims to improve the well-being of the population and reduce social tension, achieving "social justice" and "community involvement" should be the key criteria for transitioning to low-carbon development

Step 7: Improve financial self-sufficiency of towns

Step 8: Promote learning and participatory planning

Step 9: Create local community spaces and infrastructure

THANK YOU



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