

**S1: Chukotka Development**

-  Development of oil and gas resources increases in response to growth in global and national demand while nuclear energy production expands to augment coal-based generation
-  Economic growth drives regional infrastructure expansion and creates opportunities for private companies and investment, such as the development of gold and polymetallic, that enhance government revenues
-  Public-private partnerships are a key instrument of economic growth. Increased attention is given to monitoring and verifying regulatory compliance as well as the pursuit of anti-corruption measures
-  Economic instruments and greater enforcement of regulations lead to greater environmental protections. Local environmental consciousness rises
-  Economic growth and enhanced government revenue contributes to job creation, education, and social stability that benefit local communities
-  Economic development creates new opportunities for local communities to undertake adaptation actions to address the risks of climate change

**S2: Chukotka Inequality**

-  Growth in global and regional fossil fuel demand stimulates investment by private and state-owned companies in development of Chukotka energy resources
-  Private and state-owned companies benefit from government incentives that target the mining sector, particularly gold, which is accompanied by financial flows to local, regional, and federal governments
-  Conflicts develop among indigenous groups over access to government funding, control over resource- and land-use projects, and over affiliations with corporate social responsibility (CSR) programs. Corruption is increasing
-  Compliance with environmental regulations and strict ecological norms is not fully enforced due to competing local government priorities
-  There is growing opposition among indigenous communities and local populations, especially in rural areas, to industrial development programs due to rising evidence of adverse social and environmental impacts
-  The capacity of many local communities to manage change as well as social, environmental, or economic shocks is in decline

Global Energy Demand







Institutions



Governance

Economic Growth

**S3: Chukotka Sustainability**

-  Global policies aimed at greenhouse gas emissions reductions shift investment away from coal exports and offshore oil and gas resources in the Chukchi and Bering Seas toward renewables and nuclear generation
-  Modest growth in the energy sector and stable mining revenue incentivize diversification of the economy into tourism, infrastructure development, transport, information technology, and local crafts
-  Increased coordination, cooperation and partnerships exist among governments, municipalities, business, and local communities
-  Sustainability principles are integrated with economic and social policy in both public and private organizations. The local population is increasingly active in environmental conservation efforts
-  Local and indigenous communities play an increasingly active role in the selection of renewable energy options within their households and broader communities
-  Economic diversification and greater institutional cooperation enhance the capacity of communities to transition to more sustainable development pathways that reduce vulnerability to environmental and economic shocks

**S4: Chukotka Fragmentation**

-  Declines in global oil and gas demand and the high cost of exploiting offshore resources in the Chukchi and Bering Seas limit new oil and gas development ventures to onshore alternatives that are more cost-effective
-  Economic development slows due to limited revenue from the contracting energy and mining sectors. This contributes to adverse social impacts in both urban and rural areas
-  Federal government programs become fragmented with declining social services as focus shifts to national security priorities. Private companies focus investment in urban areas, infrastructure, and extractive industries
-  Environmental damage from past and current energy production, pipelines, mining industries, and shipping is poorly managed
-  Local and indigenous communities face limited economic opportunities, resulting in increased vulnerability and marginalization from decision-making
-  Capacity of local communities and the region more broadly to adapt to the cumulative pressures of climate change, economic challenges, and fragmented institutions declines

Collaborative / Rule-based

Competitive / Risk-based



Energy



Economy



Governance



Environment



Communities



Adaptive capacity