

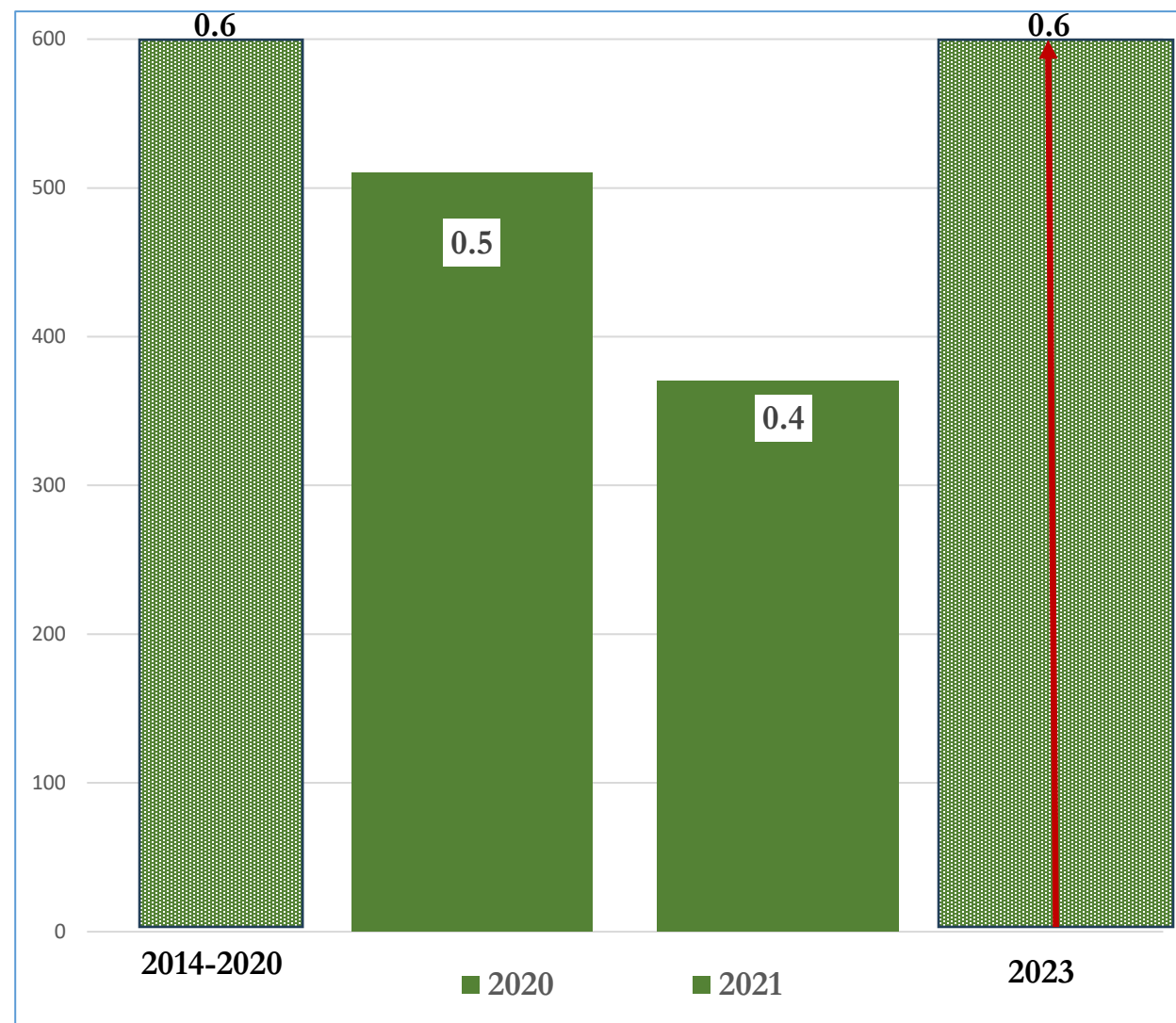
How to Attract Investment in Renewable Energy in Central Asia

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Investment in clean energy in Kazakhstan (USD billion)

(!) 2023 likely to see as much investment as during 2014-2020

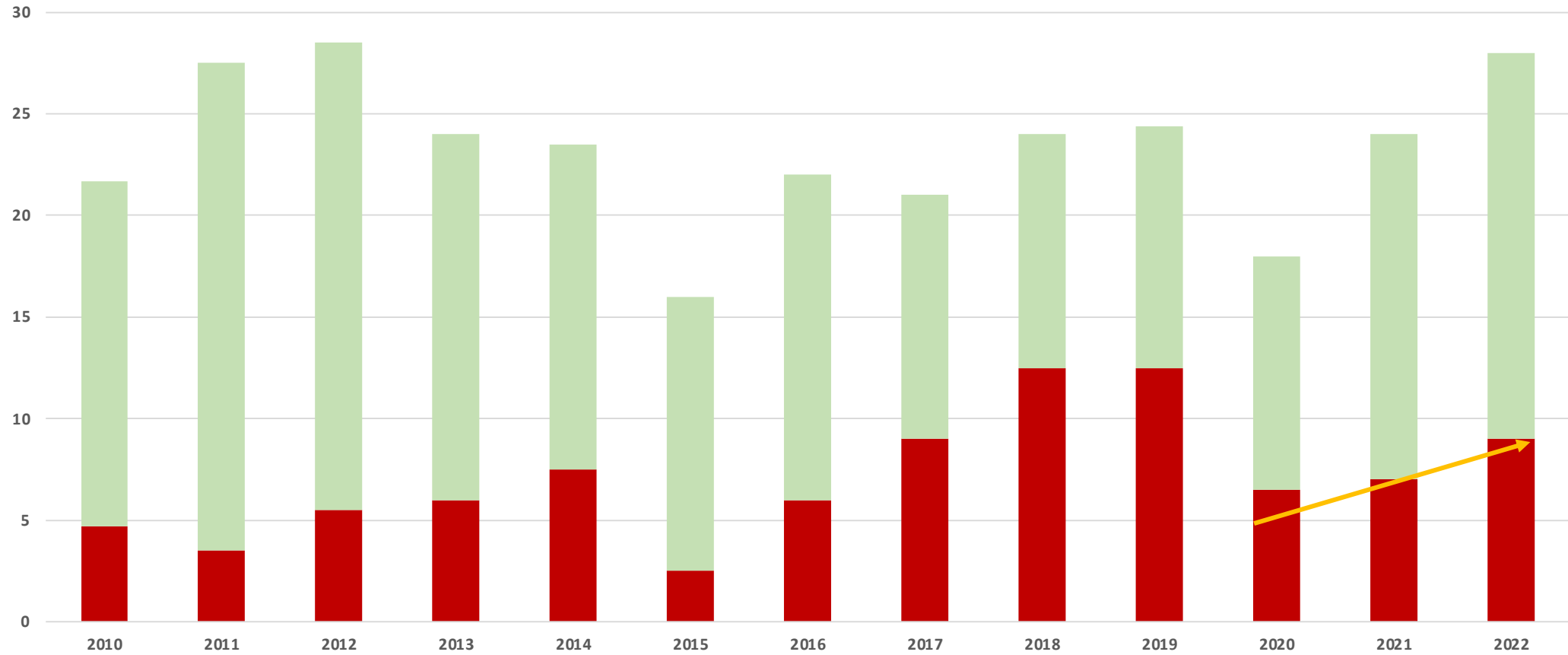


Context matters: Growing energy shortages in Central Asia in 2022-2023

- Multiple power outages in 2022-2023 (e.g., Kazakhstan, Kyrgyzstan)
- 8% increase in electricity consumption in 2022 in Kazakhstan
- 6 billion kWh electricity shortage is expected by the end of 2023 in Kazakhstan
- Renewables are not discussed as a solution



FDI in oil and gas production in 2020-2022 (billion dollars)

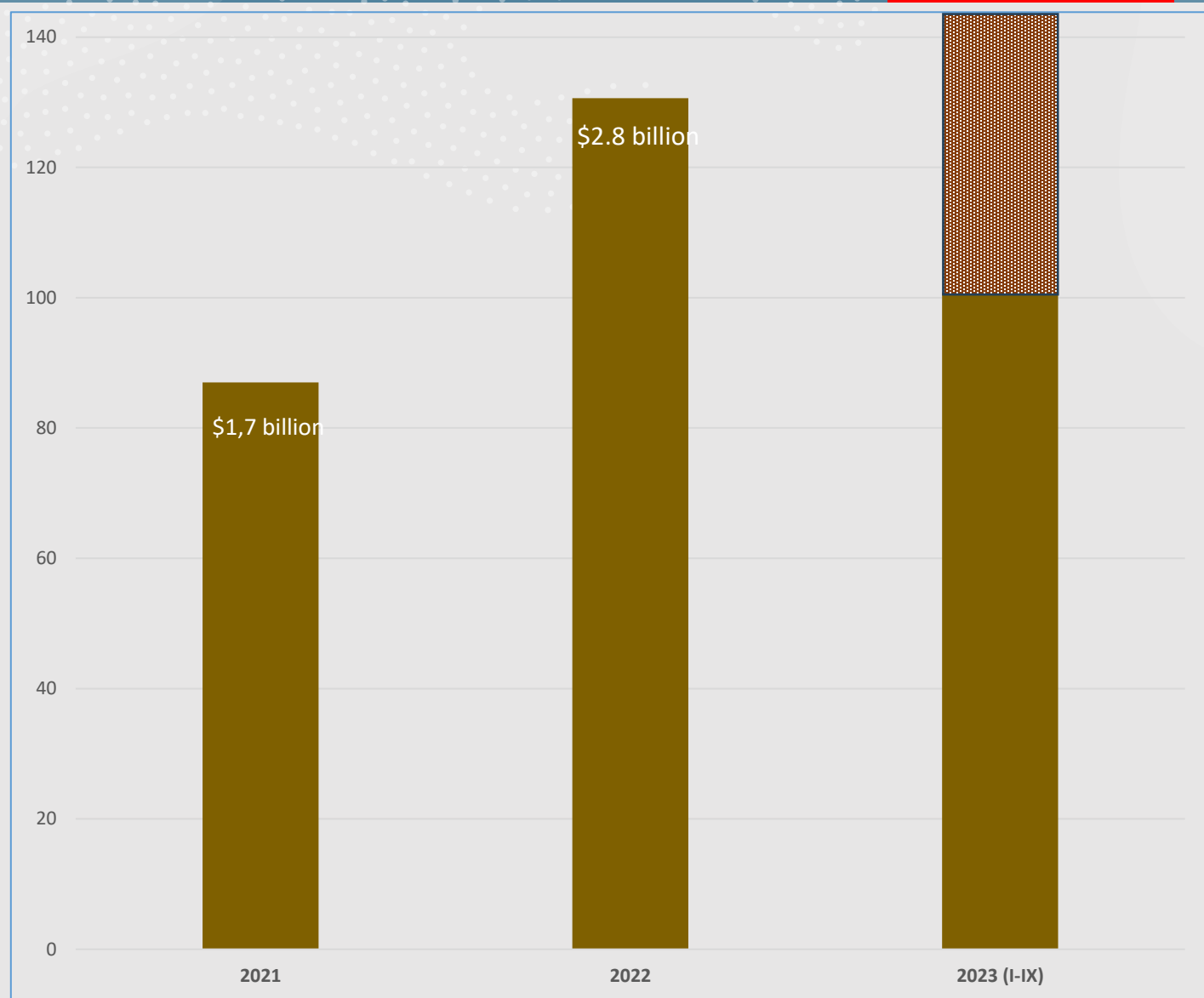


Investment in oil and gas

Investment in other sectors

Source: National Bank of Kazakhstan (2023).

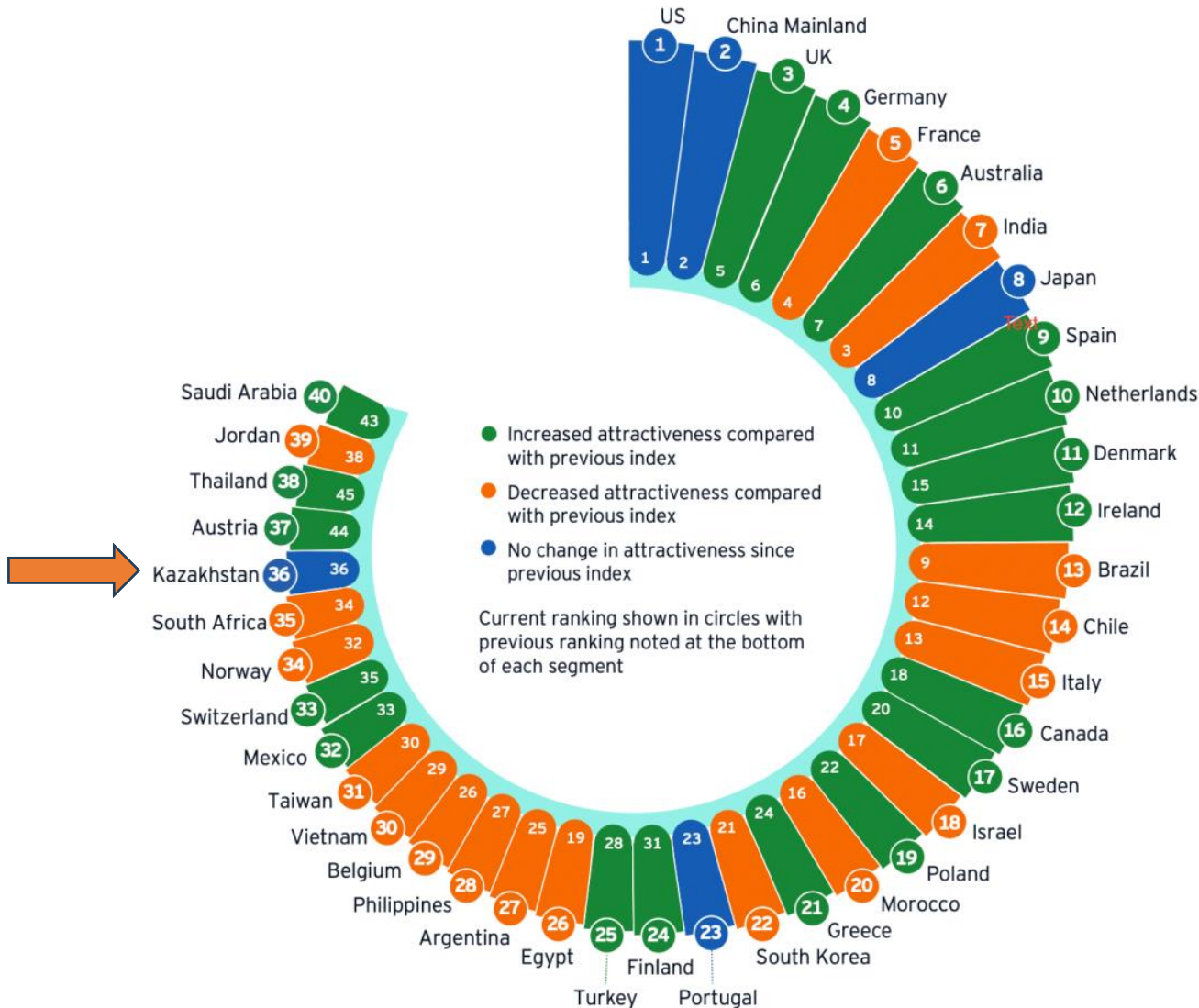
Investments in the coal industry (USD billion)



Fossil fuels sectors are likely to expand further

- The two largest coal producers in Kazakhstan, Bogatyr Komir and Shubarkol Komir, intend to increase production from 54.8 to almost 64.8 million tons per year after 2024 (+18%)
- Kazakhstan plans to expand coal exports to Uzbekistan from 0.5 million tons in 2022 to 12.8 million tons in 2025
- Chinese and European firms consider investing in small-scale coal-based power stations for cryptomining

Ernst & Young Renewable Energy Country Attractiveness Index 2023



- Kazakhstan ranked 36 in 2023
- It was no. 30 in 2019
- Other countries are moving faster

Main trends in business climate for renewables

- By 2022:
 - 146 countries set renewable energy targets
 - 138 established support policies
 - 113 passed national renewable energy laws
- Investor support beyond setting tariffs and auctions is key
- Building strong institutions

Attracting investment: Best practices

- Build capacity for renewable energy governance
- Prioritise renewables in investment regulation framework
- Facilitate market entry for investors and mobilise domestic investors
- Improve bankability of renewable energy projects

Concluions

- Renewables are yet to replace fossil fuels in the energy mix in Central Asia. Both grow due to growing energy demand
- Renewables are still less prioritized than fossil fuels in the governance system
- Develop human capital for renewable energy governance and maintenance