

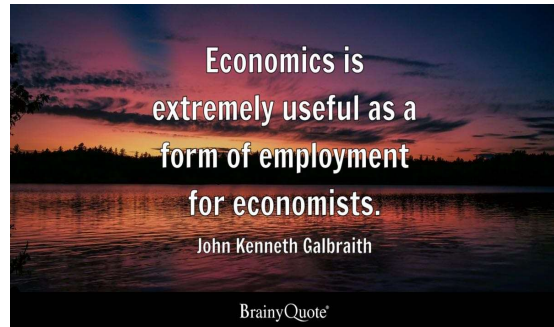
# North Dakota and its Economic Situation

01.24.24

Prepared by: Armada Corporate Intelligence  
Dr. Chris Kuehl



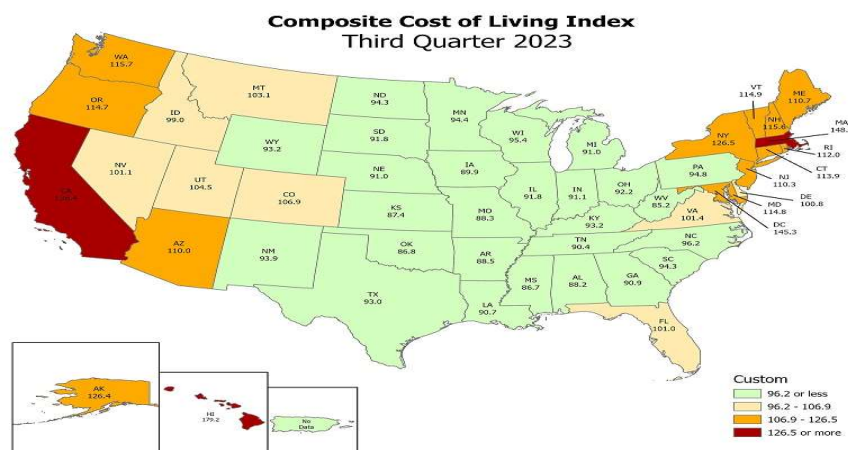
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## Cost of Living

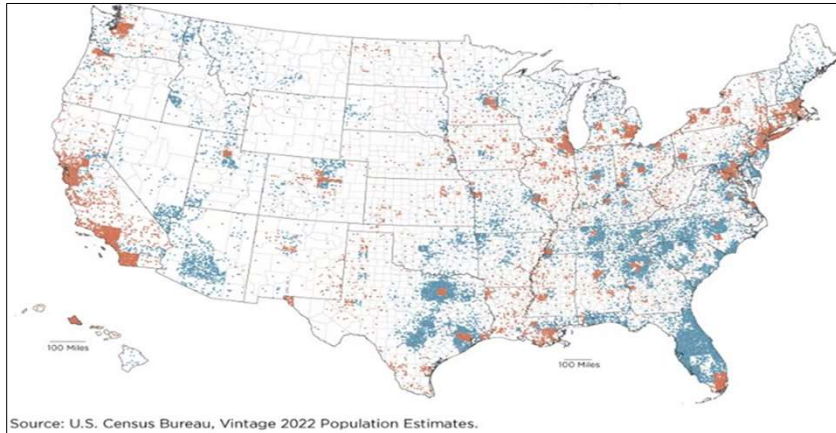


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## National Population Shifts



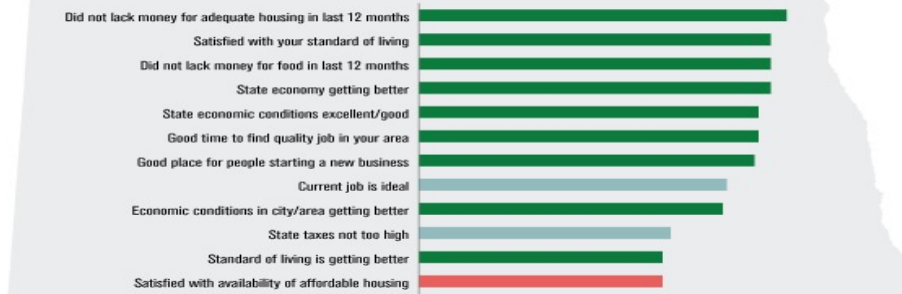
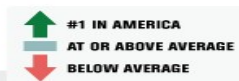
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## Pretty Robust Rankings

### ECONOMICS THE STATE OF NORTH DAKOTA

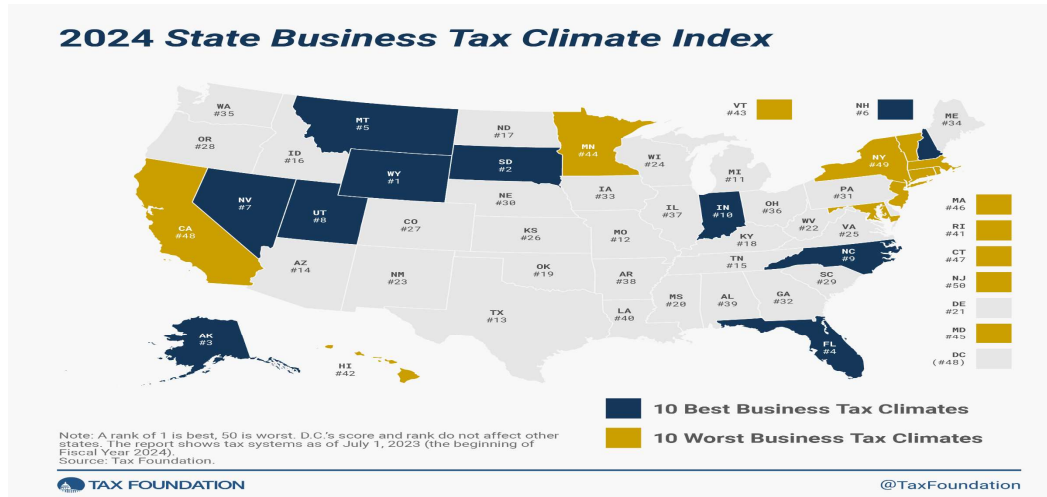


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## Between Best and Worst

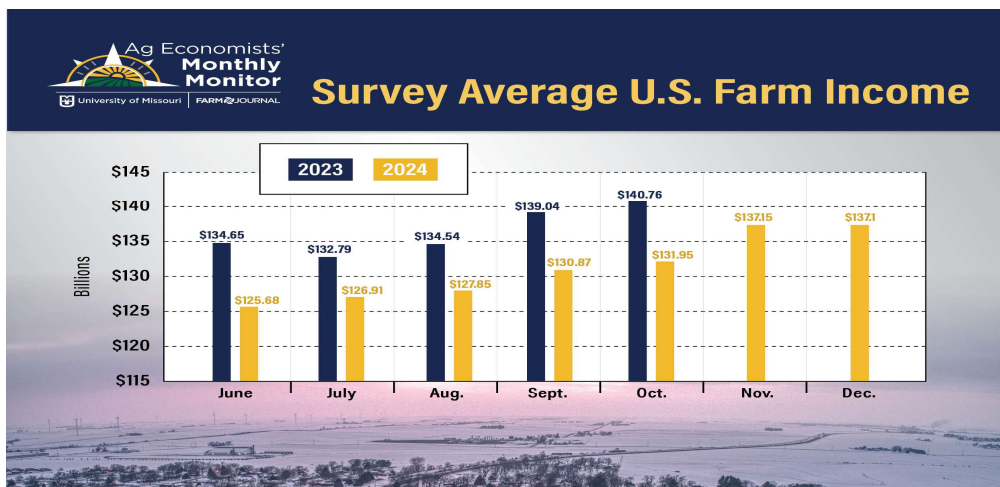


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## Some Expected Improvement

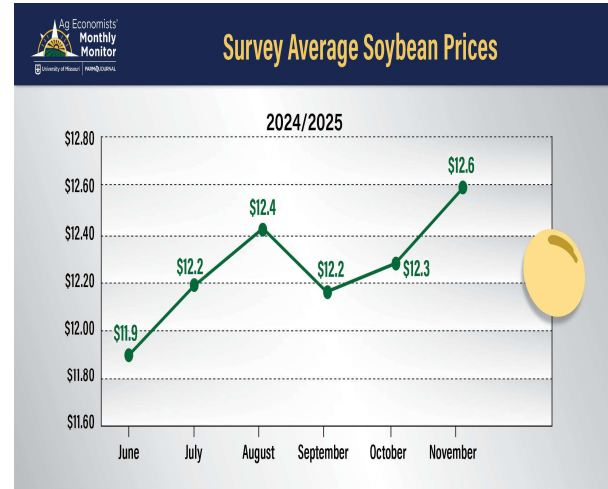
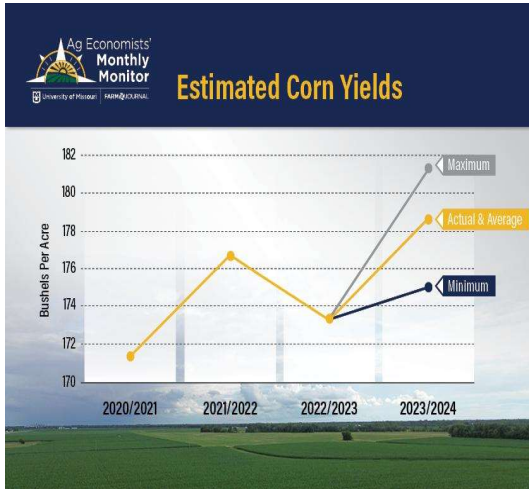


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## Corn and Soybeans



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## Farm Sector Optimism



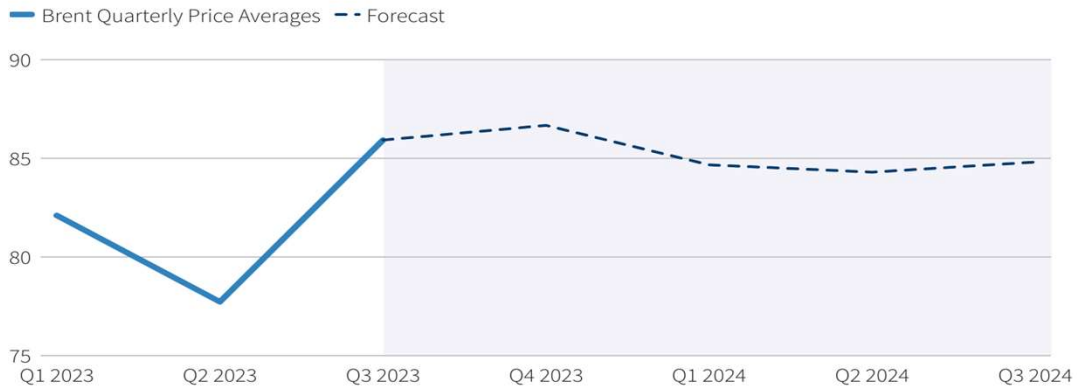
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## Global Oil Price Stable

### Brent crude oil seen averaging under \$85/bbl next year



Note: Figures are period averages in dollars per barrel  
Source: LSEG data, Reuters November oil price poll

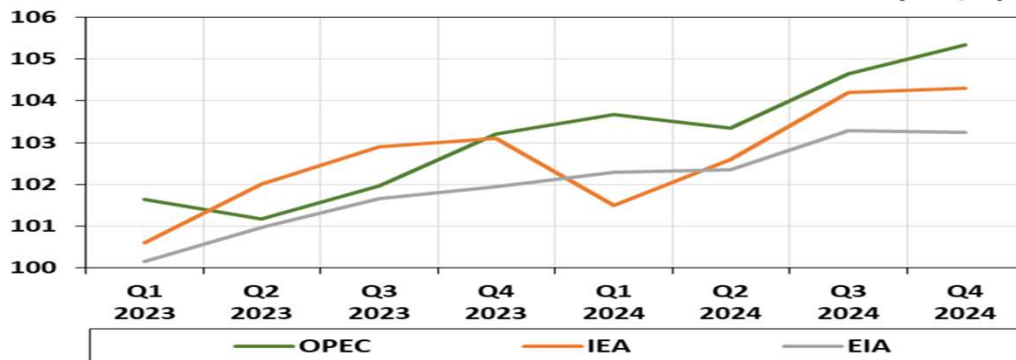
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## Demand to Increase?

**Figure (1)**  
**Estimates of Global Oil Demand for 2023 and 2024 (mb/d)**



Source: OPEC, IEA, EIA, 2023 and EOA, 2023.

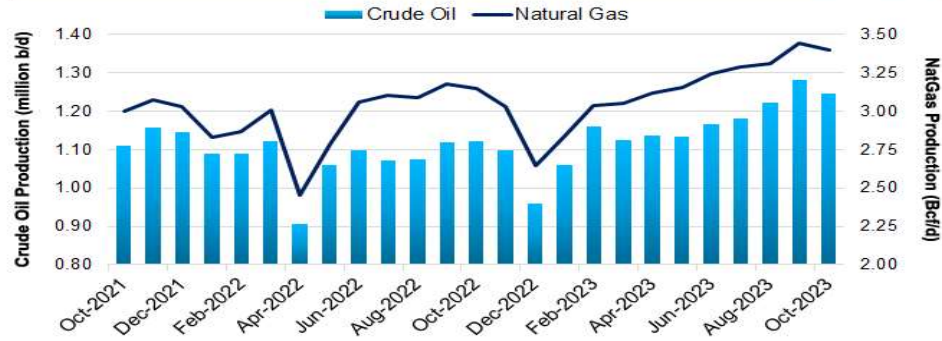
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## Production Expected to Rise

### North Dakota Crude Oil & Natural Gas Production **NGI**



**Source:** Compiled by NGI from North Dakota Department of Mineral Resources documents, NGI calculations

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## Total Eye Chart – My Apologies!

Figure 1

### Emerging paradigms in the oil and gas industry

#### Potential disruptors

##### Geopolitical uncertainty

- Evolving situations in Eastern Europe and the Middle East
- Changing patterns of global trade

##### Emergence of new technologies

- Majority of clean energy technologies remains under development
- Securing supply chain is imperative for upcoming technologies

##### Macroeconomic environment

- High inflation is increasing material and capital costs
- Rising interest rates is driving 10-year treasury yields to their highest levels since 2007

##### Policy and regulatory initiatives

- Net-zero emissions by 2050 targeted by 106 nations
- Governments worldwide allocated US\$1.34 trillion in clean energy since 2020

#### Key oil and gas trends in 2024

1

##### Energy transition

Prudently allocating capital and effectively executing clean energy policies

2

##### Critical minerals

Participating in the energy transition by securing a position in the supply chain to tackle perceived end-market risks

3

##### Global energy trade

Embracing the growing dynamism in energy trade and relationships

4

##### Technology adoption

Harnessing the power of generative AI for innovative solutions and new value creation

5

##### Downstream industry

Revamping the refining industry in alignment with evolving demand patterns

Sources: Emergence of New Technologies (Deloitte Green Space Navigator), Macroeconomic environment (Construction Dive; Federal Reserve Bank of St. Louis), Policy and Regulatory Initiatives (Net zero tracker Data Explorer; IEA's Government Energy Spending Tracker).

**Deloitte** | [deloitte.com/us/en/insights/research-centers/center-energy-industrials.html](https://deloitte.com/us/en/insights/research-centers/center-energy-industrials.html)

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