U.S. Grid Operations — Executive Overview
Real-time analytics across 10 US balancing authorities

Data Through
Feb 11, 2026, 12:00:00 AM

Balancing Authority ▾
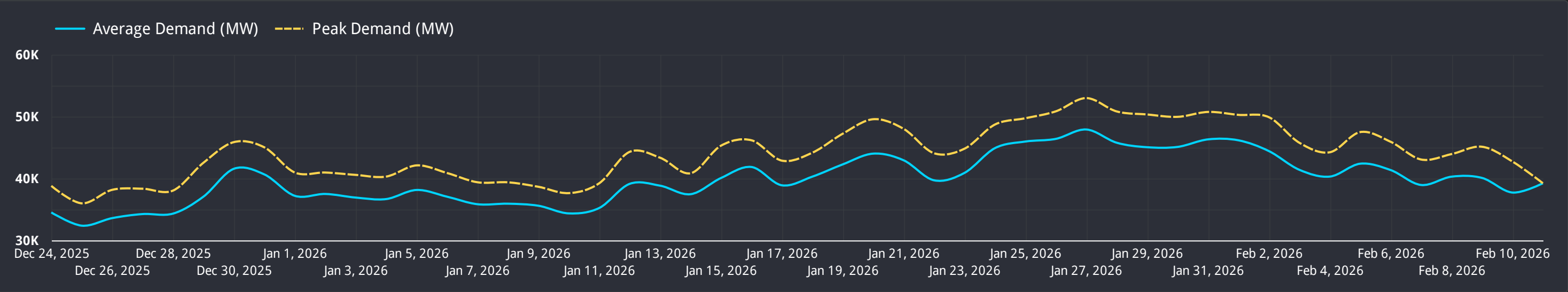
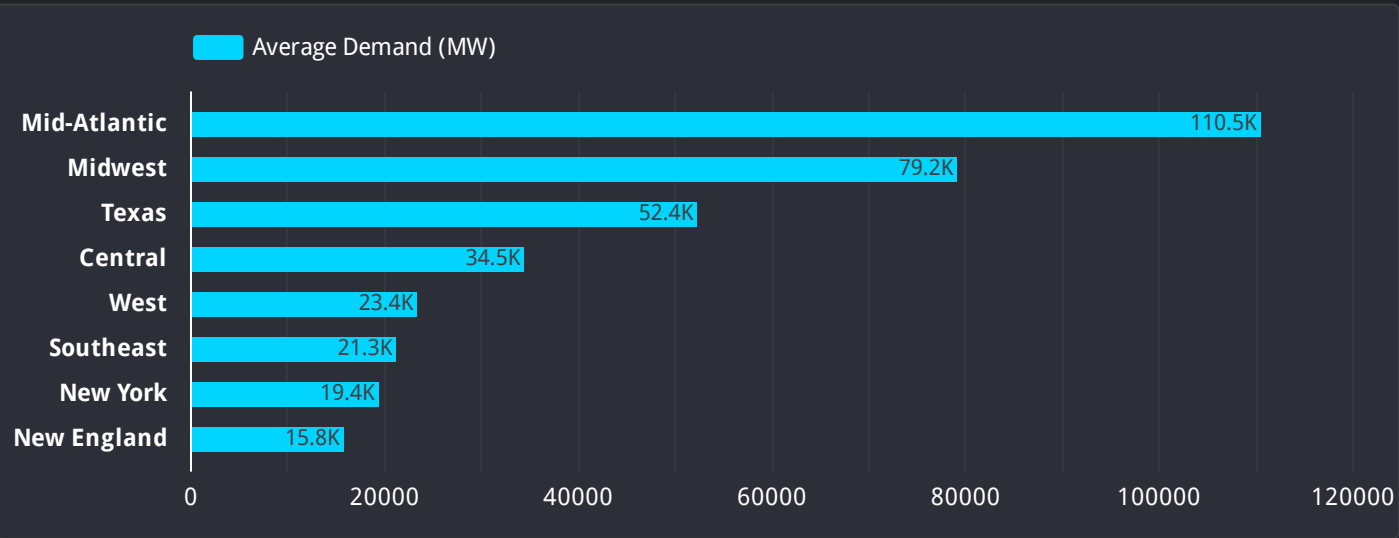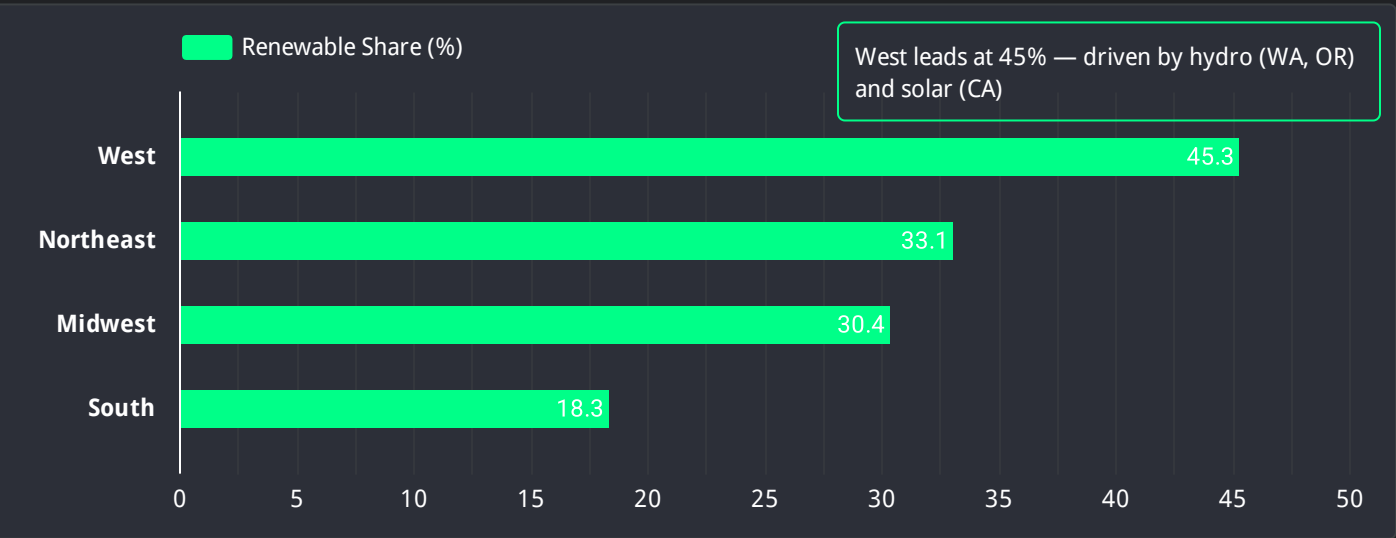| Forecast MAPE (%)	Avg Demand (MW)	Peak Demand (MW)	Renewable Share (%)	Avg Price (¢/kWh)
5.55	42223	139,410	31	17.89

Demand & Peak Trend — 60-Day Rolling Window

— Average Demand (MW)   - - - Peak Demand (MW)

Average Demand (MW) by Region

Average Demand (MW)

- Mid-Atlantic: 110.5K
- Midwest: 79.2K
- Texas: 52.4K
- Central: 34.5K
- West: 23.4K
- Southeast: 21.3K
- New York: 19.4K
- New England: 15.8K

Renewable Share (%) by Region

Renewable Share (%)

West leads at 45% — driven by hydro (WA, OR) and solar (CA)

- West: 45.3
- Northeast: 33.1
- Midwest: 30.4
- South: 18.3

Grid Operations - Daily Forecast Performance

Daily MAPE	Avg Demand (MW)	Peak Utilization (%)	Hours Above 90% Utilization
5.05	39.9K	64.0	0

Daily Demand vs. Forecast Accuracy (MAPE %)

— Average Demand (MW)   — Peak Demand (MW)   ▬ MAPE Daily
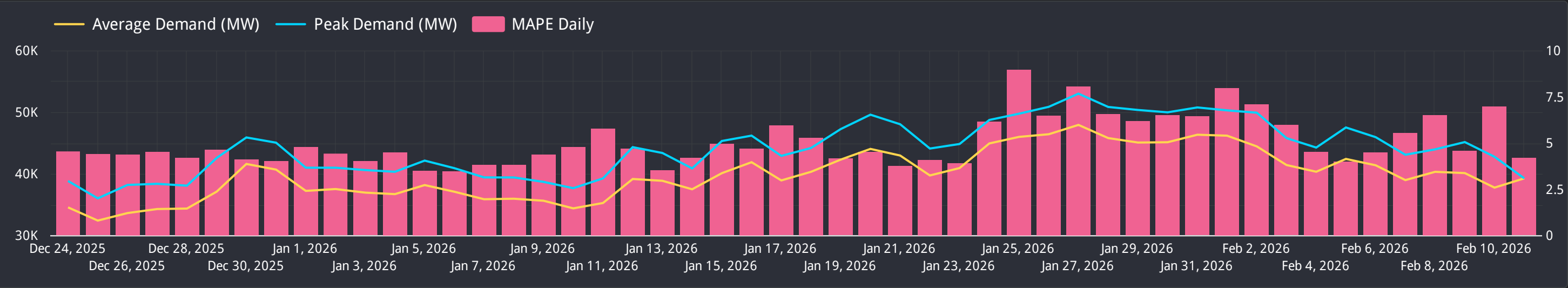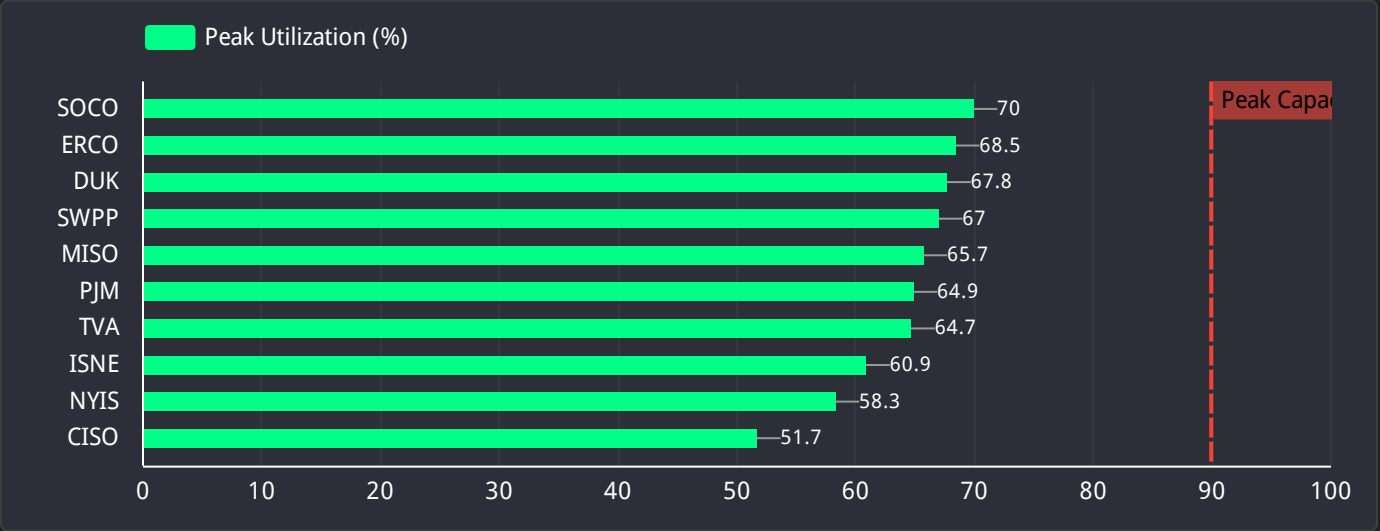
Forecast Accuracy by Balancing Authority

	BA NAME	MONTH	MAPE (%) ▾	RMSE (MW)	MEAN BIAS (MW)
1.	Duke Energy Carolinas	Feb 1, 2026	21.15	3,269.8	2,694.3
2.	Southwest Power Pool	Jan 1, 2026	13.48	6,355.6	-5,673.1
3.	Southwest Power Pool	Dec 1, 2025	13.34	5,117.6	-4,970.3
4.	Southwest Power Pool	Feb 1, 2026	11.3	4,454.5	-4,337.4
5.	Duke Energy Carolinas	Jan 1, 2026	9.51	2,063.6	805.1
6.	California ISO	Jan 1, 2026	7.98	2,938	1,526.7
7.	California ISO	Dec 1, 2025	7.05	2,421.9	990.1

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Peak Utilization (%) by BA

Peak Utilization (%)

- SOCO — 70
- ERCO — 68.5
- DUK — 67.8
- SWPP — 67
- MISO — 65.7
- PJM — 64.9
- TVA — 64.7
- ISNE — 60.9
- NYIS — 58.3
- CISO — 51.7

U.S. Energy Transition - Generation Mix Analysis

| Select date range ▾ | State ▾ | Census Region ▾ |

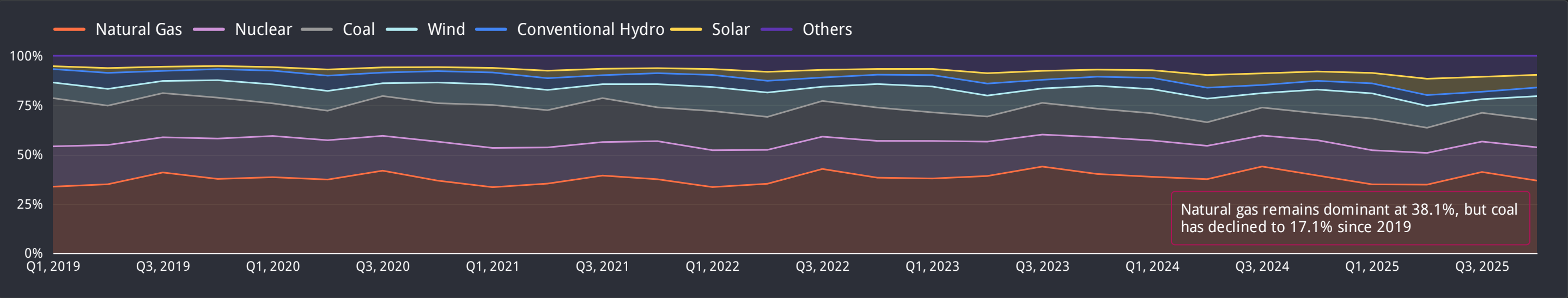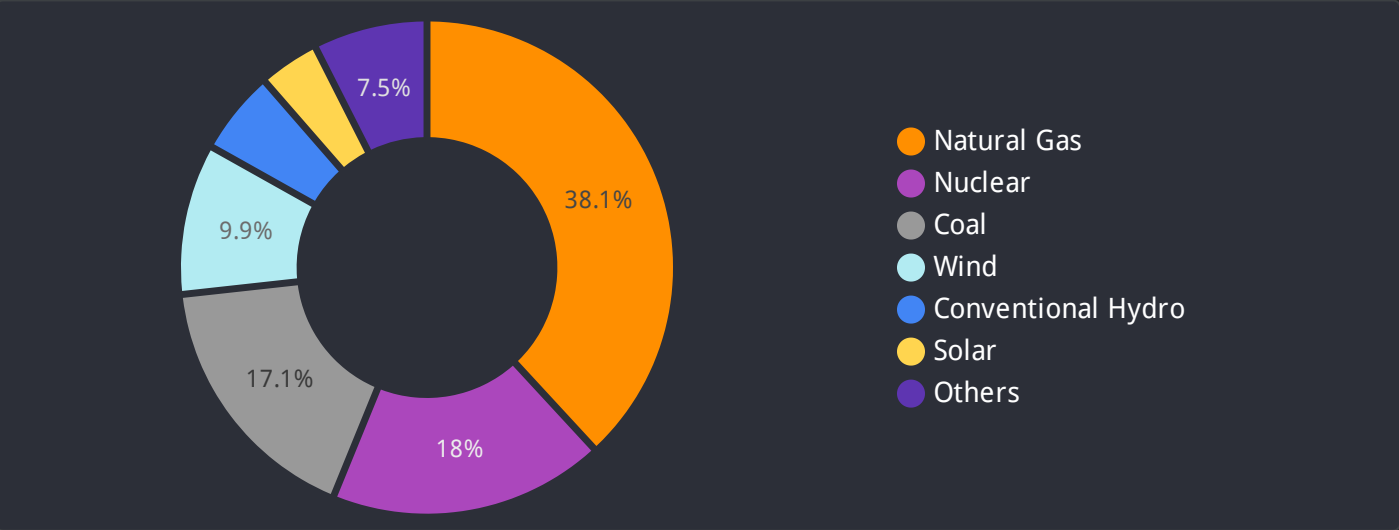| Renewable Share (%)	Total Generation (MWh)	Coal Share (%)	Wind + Solar Share (%)
30.6	30.8M	19.6	18.6

U.S. Generation Mix Share (%) — 2019–2025

Legend: — Natural Gas — Nuclear — Coal — Wind — Conventional Hydro — Solar — Others

Natural gas remains dominant at 38.1%, but coal has declined to 17.1% since 2019

X-axis: Q1, 2019 · Q3, 2019 · Q1, 2020 · Q3, 2020 · Q1, 2021 · Q3, 2021 · Q1, 2022 · Q3, 2022 · Q1, 2023 · Q3, 2023 · Q1, 2024 · Q3, 2024 · Q1, 2025 · Q3, 2025

Y-axis: 0% · 25% · 50% · 75% · 100%

Generation by Fuel Type — Current Mix

- Natural Gas — 38.1%
- Nuclear — 18%
- Coal — 17.1%
- Wind — 9.9%
- Conventional Hydro
- Solar
- Others — 7.5%

Renewable Share by State

Pacific Northwest: 70%+ renewable (hydropower dominance) - WA, OR, ID

4.471 — 97.939

Fossil Fuel Dominant Southeast: <20%
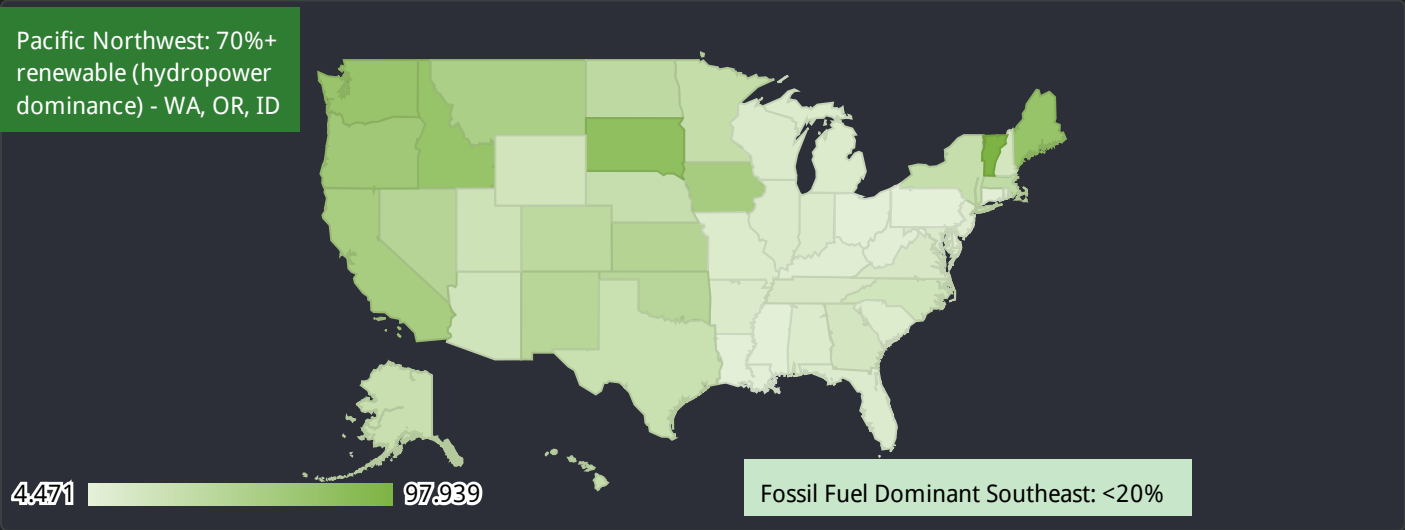
Renewable Energy Economics — Price vs. Share Analysis

Select date range ▾   State ▾   Sector ▾

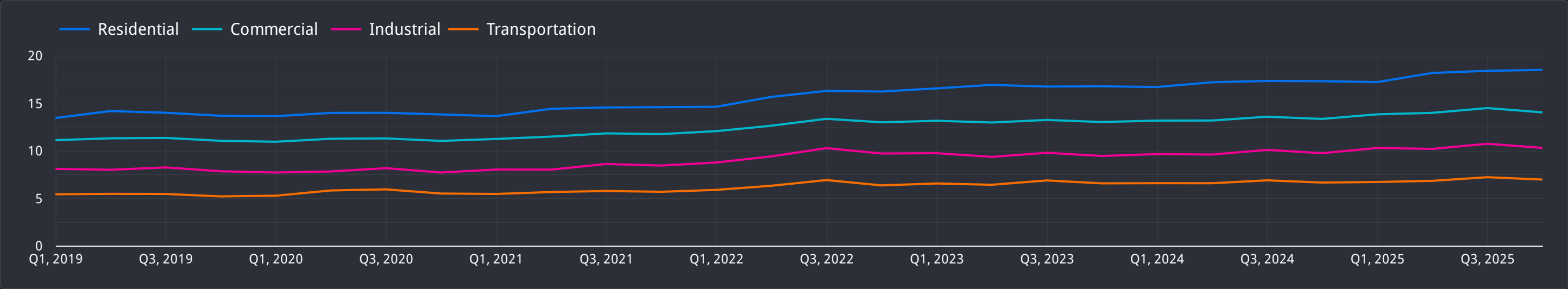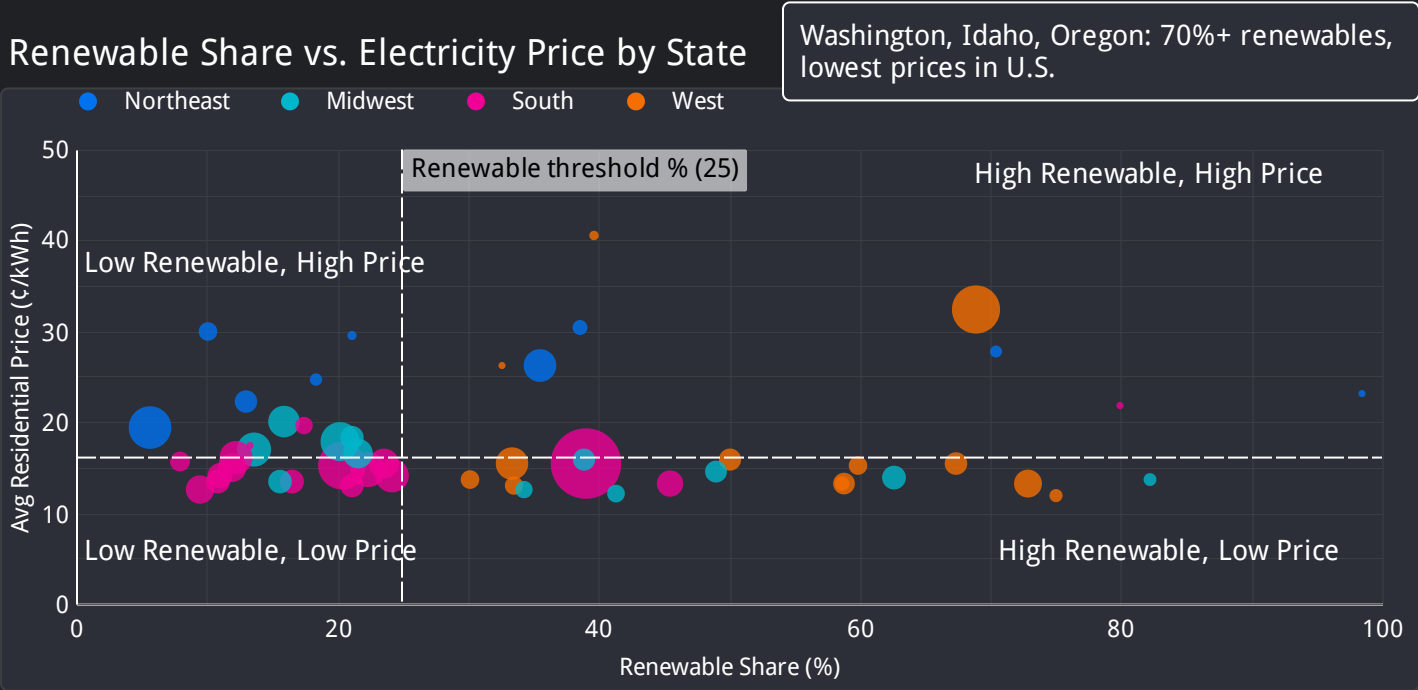| Avg Residential Price (¢/kWh)	Total Revenue ($M)	Avg Renewable Share (%)	Highest Price State (¢/kWh)
10.81	3.2M	35.22	Hawaii

Electricity Price by Sector Over Time (¢/kWh) — 2019–2025

Residential — Commercial — Industrial — Transportation

Renewable Share vs. Electricity Price by State

Washington, Idaho, Oregon: 70%+ renewables, lowest prices in U.S.

● Northeast ● Midwest ● South ● West

Renewable threshold % (25)

High Renewable, High Price

Low Renewable, High Price

Low Renewable, Low Price

High Renewable, Low Price

Avg Residential Price (¢/kWh)

Renewable Share (%)

Top 10 Most Expensive States (¢/kWh)

avg_residential_price

Key Finding: High renewable share does not correlate with higher electricity prices. Hydropower-rich states (WA, OR, ID) achieve 70%+ renewables with some of the lowest prices in the nation.

National Average (16)

State	¢/kWh
Hawaii	40.6
California	32.4
Massachusetts	30.5
Connecticut	30
Rhode Island	29.5
Maine	27.8
New York	26.3
Alaska	26.3
New Hampshire	24.6
Vermont	23.2