Executive Summary
Energy Forecast 2024-2030

This executive summary provides a concise overview of the projected energy demand and supply trends for the period 2024 to 2030. The forecast is based on current consumption statistics, economic growth scenarios, policy initiatives, and emerging technology adoption across various sectors.

Key Highlights

- **Total Energy Demand:** Expected to grow at a compound annual growth rate (CAGR) of 2.3%, reaching 7,200 TWh by 2030.

- **Renewable Energy Share:** Forecasted to increase from 24% (2024) to 38% (2030) of the total energy mix due to accelerated investments and policy incentives.

- **Fossil Fuel Decline:** Coal and oil contributions are projected to decrease by 13% and 9% respectively, driven by carbon reduction commitments.

- **Sectoral Growth:** Significant demand growth anticipated in transport (+4.8% CAGR) and industry (+2.5% CAGR), with electrification and efficiency measures expected to moderate overall demand increases.

- **Grid & Infrastructure:** Grid modernization and energy storage capacity to more than double by 2030, supporting integration of variable renewable generation.

Risks & Uncertainties

The forecast accounts for potential risks including supply chain constraints, technology adoption rates, policy shifts, and global economic volatility. Greater than expected uptake of electric vehicles and changes in regulatory frameworks could impact projections.

Conclusion

As the country transitions toward a low-carbon energy system, aligning investments with technological innovation and regulatory frameworks will be critical. This forecast serves as a basis for strategic planning and policy formulation for sustainable energy growth through 2030.

Important Notes

- Executive summaries should be concise, highlighting only key findings and recommendations.

- All data and projections should be supported by credible sources and clearly referenced in the main report.

- The summary should be updated regularly to reflect significant changes in market, policy, or technology trends.

- Ensure that language is accessible to non-technical stakeholders and decision-makers.