

World Electricity Analysis

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Summary

Detailed Analysis of Access to Electricity Trends - The analysis of global access to electricity highlights significant progress in high-income and developed countries, where universal access is nearly achieved, thanks to advanced infrastructure and economic stability. Regions like Sub-Saharan Africa exhibit persistent challenges, with minimal improvements and lower access rates, underscoring ongoing issues in infrastructure and economic development. In contrast, countries in South Asia and Latin America are showing positive trends, with gradual improvements in access due to effective policies and investments. However, some nations face stagnation or decline in access rates, driven by political and economic instability. Overall, while developed regions display high access levels, developing regions continue to struggle, emphasizing the need for targeted interventions to address disparities and enhance global electricity access.

Analysis of Transmission and Distribution Losses - The analysis of transmission and distribution losses reveals significant regional disparities. Europe & Central Asia and Sub-Saharan Africa experience the highest losses, with totals of 8180.44 and 7282.74, respectively. These high figures suggest inefficiencies in infrastructure and maintenance. Conversely, North America reports the lowest losses at 209.8, attributed to advanced infrastructure and effective management. East Asia & Pacific and Latin America & Caribbean exhibit moderate losses, indicating regional differences in infrastructure quality and management practices. The Middle East & North Africa also shows moderate losses, reflecting varying challenges. High losses can lead to increased costs and reduced reliability, highlighting the need for infrastructure modernization and improved maintenance. Strategic recommendations include investing in modern infrastructure, adopting smart technologies, and enhancing maintenance practices, with North America's practices serving as a benchmark for efficiency improvements.

Analysis of Electricity Production by Source - The analysis of electricity production by source across different regions highlights key trends and disparities. Europe & Central Asia leads with the highest total production and a diverse energy portfolio, including significant nuclear and oil contributions. In contrast, East Asia & Pacific and North America also have substantial production totals, with North America showing a strong reliance on nuclear energy. Latin America & Caribbean and South Asia exhibit lower production levels but demonstrate a focus on oil and renewable sources. Oil production is prominent globally, especially in Europe & Central Asia and the Middle East & North Africa, reflecting extensive oil reserves. Nuclear energy is notably high in North America and Europe & Central Asia, while renewable production varies, being substantial in some regions but minimal in others like Sub-Saharan Africa. The data suggests a need for policy adjustments to diversify energy sources, with potential growth areas in renewable and nuclear energy investments to align with global sustainability goals.

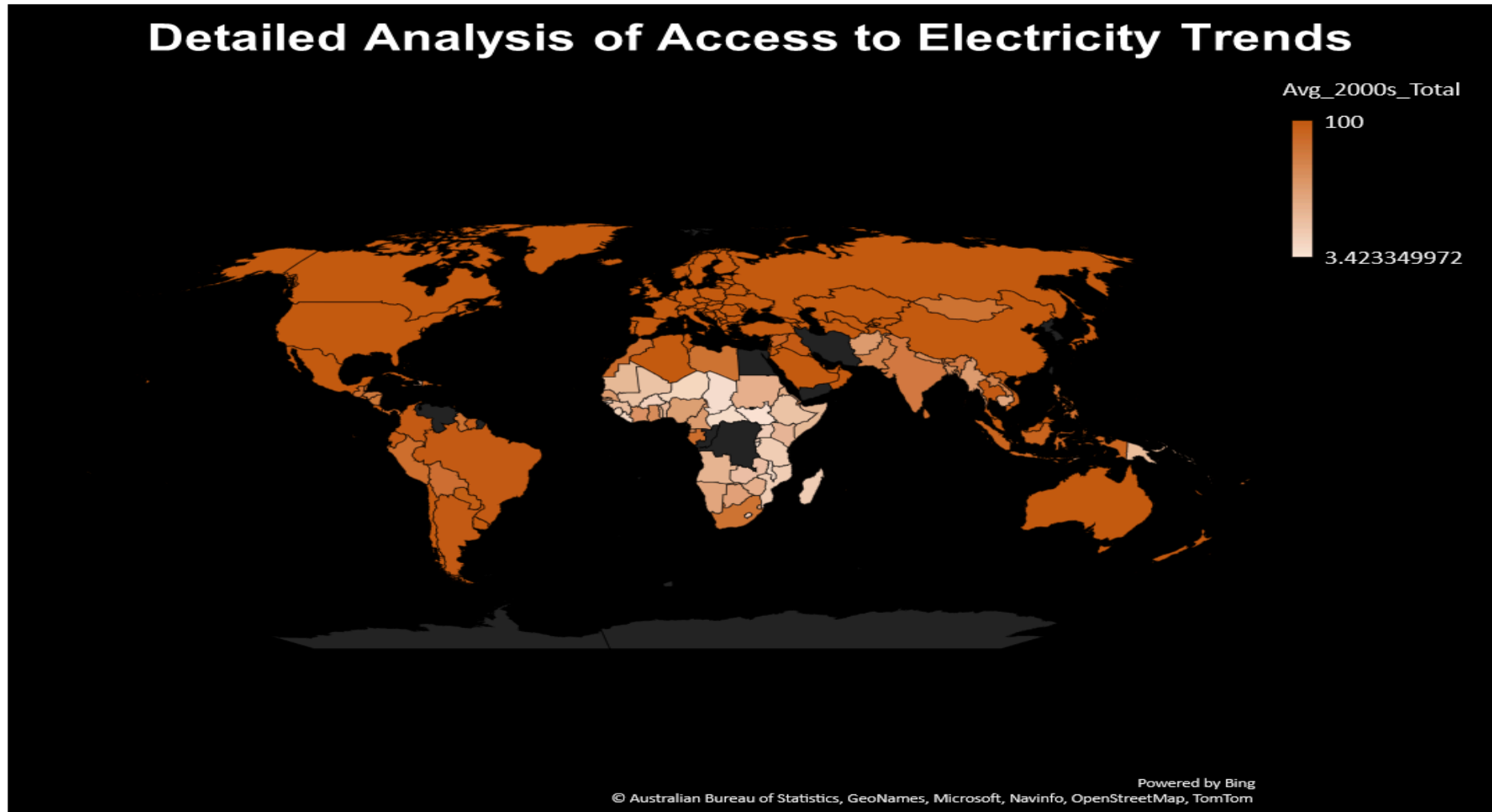
Analysis of Electricity Production Across Different Sources (Nuclear and Oil) from 2000 to 2014 - The analysis of electricity production from nuclear and oil sources from 2000 to 2014 reveals distinct trends influenced by various global factors. Nuclear energy production remained relatively stable until a significant decline post-2011, driven by the Fukushima Daiichi disaster and heightened safety regulations. This

decline saw a low in 2012 but began a modest recovery by 2014, reflecting improvements in nuclear technology and resumed operations of some reactors. Conversely, oil-based production demonstrated a consistent decline throughout the period, from 3517 TWh in 2000 to 2579.16 TWh in 2014. This drop is attributed to rising oil costs, environmental regulations, and a global shift towards renewable energy sources. The contrasting trends underscore the global transition towards cleaner energy and the impact of significant events on nuclear energy. This analysis highlights the complex interplay of technological, regulatory, and economic factors shaping the energy landscape and offers insights into future energy policy directions.

Evolution of Nuclear Power Presence: A Regional and Income Group Analysis (2000-2015) - The analysis of nuclear power production from 2000 to 2015 reveals significant regional and income group disparities. Europe & Central Asia consistently led in nuclear power generation, peaking at 735.54 TWh in 2002 and maintaining high production levels in subsequent years. This dominance reflects the region's substantial investment and infrastructure in nuclear energy. East Asia & Pacific and North America also exhibited steady production, with East Asia showing significant but not peak levels and North America reaching a high of 34.68 TWh in 2004. Conversely, Sub-Saharan Africa had negligible nuclear production, with minimal values indicating limited investment in nuclear infrastructure. Income group analysis shows that high-income countries dominate nuclear power production, reaching up to 671.35 TWh in 2001. In contrast, upper middle-income countries have gradually increased their nuclear output, peaking at 127.6 TWh in 2002. Lower middle-income and low-income countries have consistently low production levels, highlighting the financial and infrastructural barriers to nuclear energy in these economies. Overall, the stark contrast between regions and income groups underscores global disparities in nuclear energy investment and capability, with developed regions significantly ahead in nuclear power production compared to developing regions.

Analysis of Total Access to Electricity by Region and Income Group - The analysis of total access to electricity by region and income group from 2000 to 2020 highlights significant trends and disparities. High-income regions have consistently maintained near-universal access to electricity, demonstrating stability in infrastructure and policy effectiveness. Conversely, low-income and lower middle-income groups show notable improvements in electricity access, with low-income regions increasing their access from 382.68 in 2000 to 1135.1 in 2020. This upward trend reflects ongoing efforts and investments to enhance accessibility. However, substantial regional disparities persist. High-income areas like Latin America & Caribbean and Europe & Central Asia report nearly universal electricity access, while regions such as South Asia and Sub-Saharan Africa, predominantly consisting of low-income and lower middle-income countries, still struggle with lower access levels. These disparities emphasize the need for targeted interventions to close the gap between high and low-income regions. Policymakers and development agencies should leverage these insights to guide their strategies. The progress in lower income groups is encouraging, but sustained investment in infrastructure and the promotion of renewable energy are crucial. Ensuring that the least accessible regions receive focused support will be essential for achieving universal electricity access globally.

Detailed Analysis of Access to Electricity Trends



Universal Access Trends

The dataset reveals a strong trend toward universal access to electricity among high-income and developed countries. Nations such as Switzerland, Sweden, and the United States have consistently maintained 100% access to electricity across the years. This reflects the advanced infrastructure and stable economic conditions that support such high levels of access. Similarly, other developed nations and small states exhibit near-total access rates, demonstrating that economic prosperity and infrastructure development contribute significantly to achieving universal electricity access.

Regional Disparities and Improvements

Significant disparities are evident when comparing regions. Sub-Saharan Africa, for instance, shows a range of access rates, with countries like Somalia, South Sudan, and Solomon Islands consistently lagging behind. These nations exhibit minimal improvement over time, indicating persistent challenges in infrastructure development and economic stability. However, there are notable improvements in other regions. For example, countries in South Asia, such as India and Bangladesh, have shown substantial progress in increasing access to electricity over the years, reflecting successful policy interventions and investments in the energy sector.

Emerging Trends and Progress

Certain countries and regions are demonstrating promising trends in increasing access to electricity. Vietnam and Thailand, for instance, have exhibited a positive trajectory, with access rates rising steadily over the years. This trend suggests effective government policies and investments aimed at expanding electricity access. Similarly,

Stagnation and Decline

While some countries show positive trends, others experience stagnation or decline in access rates. For example, Zimbabwe and Zambia show fluctuating access rates with periods of stagnation and even decline. This variability could be attributed to political instability, economic challenges, or insufficient infrastructure development. Such countries face significant hurdles that impede consistent progress, highlighting the need for targeted interventions to address specific barriers to electricity access.

Comparative Regional Insights

A comparative analysis of regions reveals that while high-income and developed countries often achieve near-total access, low-income regions face persistent challenges. For instance, Sub-Saharan Africa's average access rate remains significantly lower compared to other regions, reflecting the complex interplay of economic, political, and infrastructural factors. On the other hand, regions with higher economic growth, such as parts of Asia and Latin America, show more optimistic trends, suggesting that economic development is closely linked with improved access to electricity.

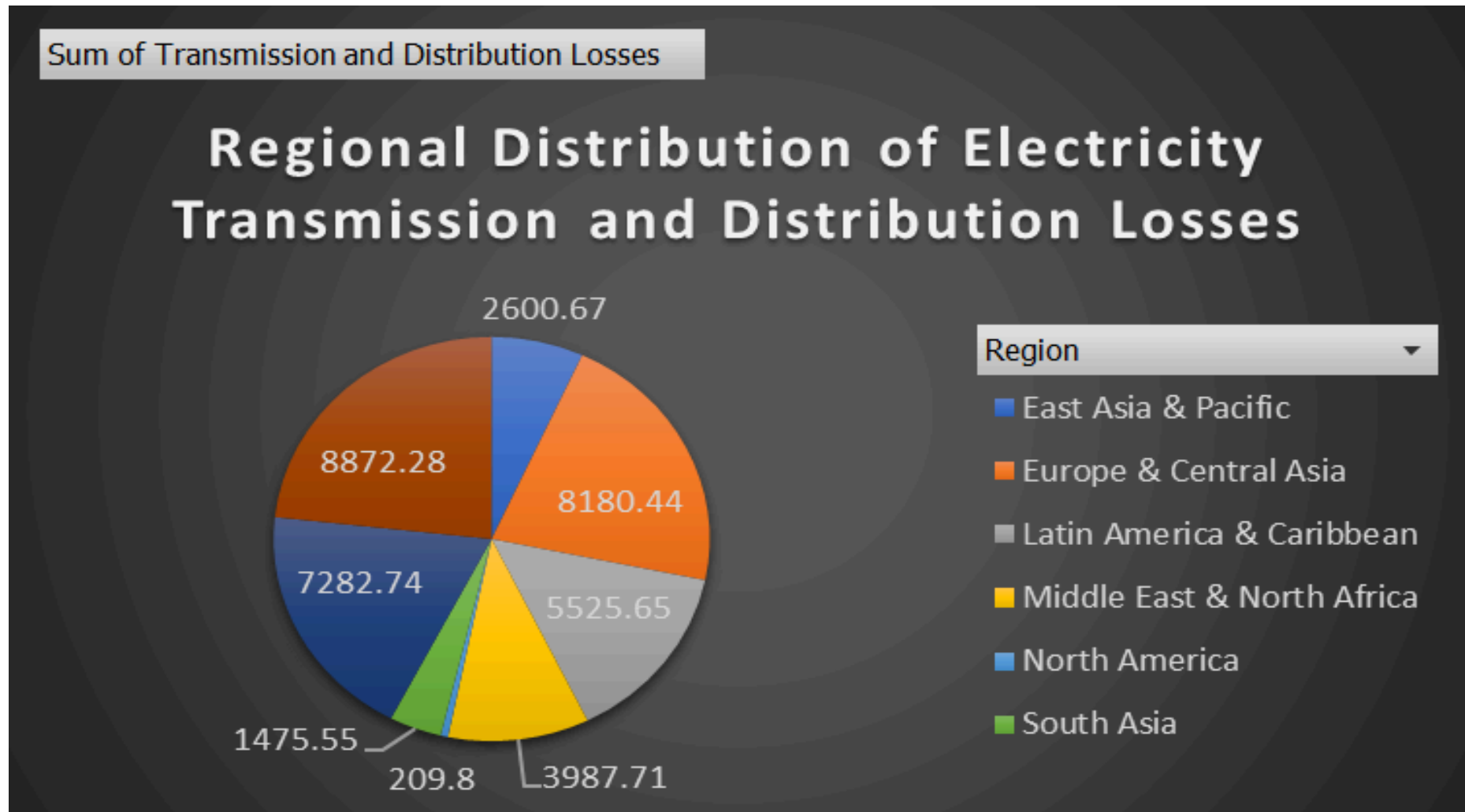
Conclusion:

The dataset illustrates a complex landscape of global electricity access, with notable achievements in developed countries and significant challenges in developing regions. The positive trends in countries like Vietnam and Thailand offer hope, but the persistent issues in Sub-Saharan Africa and fluctuating rates in some nations underscore the ongoing need for targeted and sustained efforts. Understanding these trends is crucial for policymakers and

Latin American countries like Argentina and Brazil have also shown gradual improvements, indicating a regional trend toward better energy infrastructure and accessibility.

stakeholders to devise effective strategies to enhance electricity access globally and address the disparities that still exist.

Analysis of Transmission and Distribution Losses



SQL Queries for Data Retrieval

```
SELECT
  Region,
  SUM(`Transmission and Distribution Losses`) AS Total_Losses
FROM
  electricity_transmission_distribution_losses
GROUP BY
  Region
ORDER BY
  Total_Losses DESC;
```

Regional Distribution of Losses

The data highlights significant disparities in transmission and distribution losses across different regions. Europe & Central Asia and Sub-Saharan Africa exhibit the highest losses, with Europe & Central Asia totaling 8180.44 and Sub-Saharan Africa 7282.74. This suggests that these regions face considerable inefficiencies in their electricity transmission and distribution systems. High losses can be indicative of aging infrastructure, technical inefficiencies, or inadequate maintenance practices.

On the other hand, North America shows the lowest losses at 209.8, reflecting advanced infrastructure and efficient management practices. This region's lower losses are likely a result of better technology, regular maintenance, and effective management strategies.

Comparative Regional Insights

Impact of Transmission and Distribution Losses

High transmission and distribution losses can have several negative impacts, including increased operational costs, reduced electricity supply reliability, and economic inefficiencies. Regions with high losses may face higher electricity costs, which can affect both consumers and businesses. Additionally, substantial losses often indicate underlying problems such as outdated infrastructure or technical issues, which need to be addressed to improve overall efficiency.

For example, the high losses in Sub-Saharan Africa and Latin America & Caribbean might reflect challenges related to infrastructure development and maintenance, which could be limiting the regions' ability to provide reliable and affordable electricity.

Opportunities for Improvement

Regions with high transmission and distribution losses have opportunities to improve by investing in modern infrastructure, enhancing maintenance practices, and adopting advanced technologies. Upgrading infrastructure, such as replacing old transmission lines and investing in smart grid technologies, can help reduce losses. Additionally, improving management practices and conducting regular maintenance can also contribute to lower losses and increased efficiency.

North America serves as a model with its relatively low losses, showcasing the benefits of investing in modern infrastructure and efficient management practices. Other regions could potentially reduce their losses by learning from these practices and adapting them to their local contexts.

East Asia & Pacific and **Latin America & Caribbean** fall in between the extremes, with losses of 2600.67 and 5525.65, respectively. The relatively high losses in Latin America & Caribbean compared to East Asia & Pacific suggest regional differences in infrastructure quality and management practices. East Asia & Pacific might benefit from more modernized infrastructure and better management, while Latin America & Caribbean could be facing challenges related to aging systems or inefficiencies.

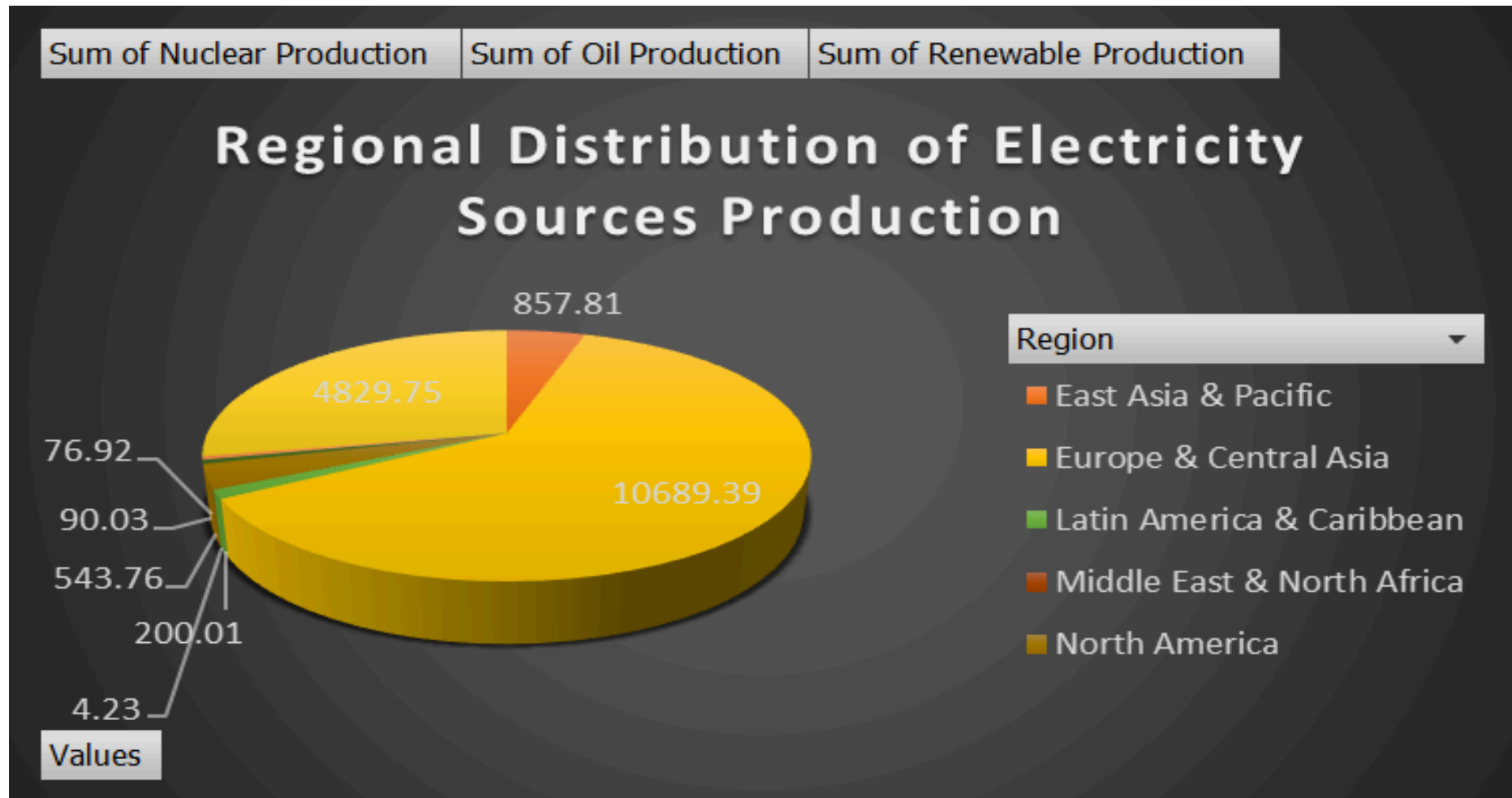
Middle East & North Africa shows losses totaling 3987.71, indicating moderate inefficiencies. This could be due to varying factors such as regional conflicts, economic conditions, or infrastructural challenges. The moderate level of losses suggests that while the region may have relatively better infrastructure compared to Sub-Saharan Africa, there is still significant room for improvement.

Strategic Recommendations

To address transmission and distribution losses, stakeholders should focus on several strategic areas:

- **Infrastructure Modernization:** Invest in upgrading outdated infrastructure to improve efficiency.
- **Technology Adoption:** Implement smart grid technologies and advanced monitoring systems to reduce losses.
- **Regular Maintenance:** Establish routine maintenance schedules to prevent and address technical issues promptly.
- **Capacity Building:** Train personnel in effective management and operational practices to enhance overall system efficiency.

Analysis of Electricity Production by Source



SQL Queries for Data Retrieval

```
SELECT
  Region,
  SUM('Nuclear Production') AS Total_Nuclear_Production,
  SUM('Oil Production') AS Total_Oil_Production,
  SUM('Renewable Production') AS Total_Renewable_Production
FROM
  electricity_production_sources_proportions
GROUP BY
  Region
ORDER BY
  Total_Renewable_Production DESC;
```

Regional Production Overview:

- **Europe & Central Asia** has the highest total production among the listed regions, with approximately 4.33 trillion units. This is significantly higher compared to other regions. Europe & Central Asia also lead in both nuclear and oil production, highlighting a diverse and robust energy portfolio.
- **East Asia & Pacific** follows with a total production of around 2.26 trillion units, with a considerable amount of oil production (2861.28 units) but relatively lower nuclear production.
- **North America** also has a substantial total production of about 2.78 trillion units, with a significant share of nuclear production (543.76 units), indicating a strong reliance on nuclear energy.
- **Latin America & Caribbean** and **South Asia** have lower total production figures, approximately 826.83 billion and

Trends in Production Sources:

- **Oil Production** is dominant in most regions, particularly in Europe & Central Asia and the Middle East & North Africa. This dominance reflects a global trend towards oil-based energy sources, especially in regions with extensive oil reserves.
- **Nuclear Production** is prominently featured in North America and Europe & Central Asia, indicating their significant investments in nuclear energy as part of their energy strategy.
- **Renewable Production** is substantial across the board, especially in regions with lower total production. However, its proportion varies greatly, with high figures in regions like Europe & Central Asia and low figures in regions like Sub-Saharan Africa.

Regional Comparison:

- **East Asia & Pacific** and **Europe & Central Asia** show high figures in renewable production, suggesting a significant push towards sustainable energy sources in these regions.
- **Latin America & Caribbean** and **South Asia** have less emphasis on nuclear energy but higher proportions of oil production. This suggests a potential area for growth in nuclear and renewable energy investments.

Implications for Energy Policy:

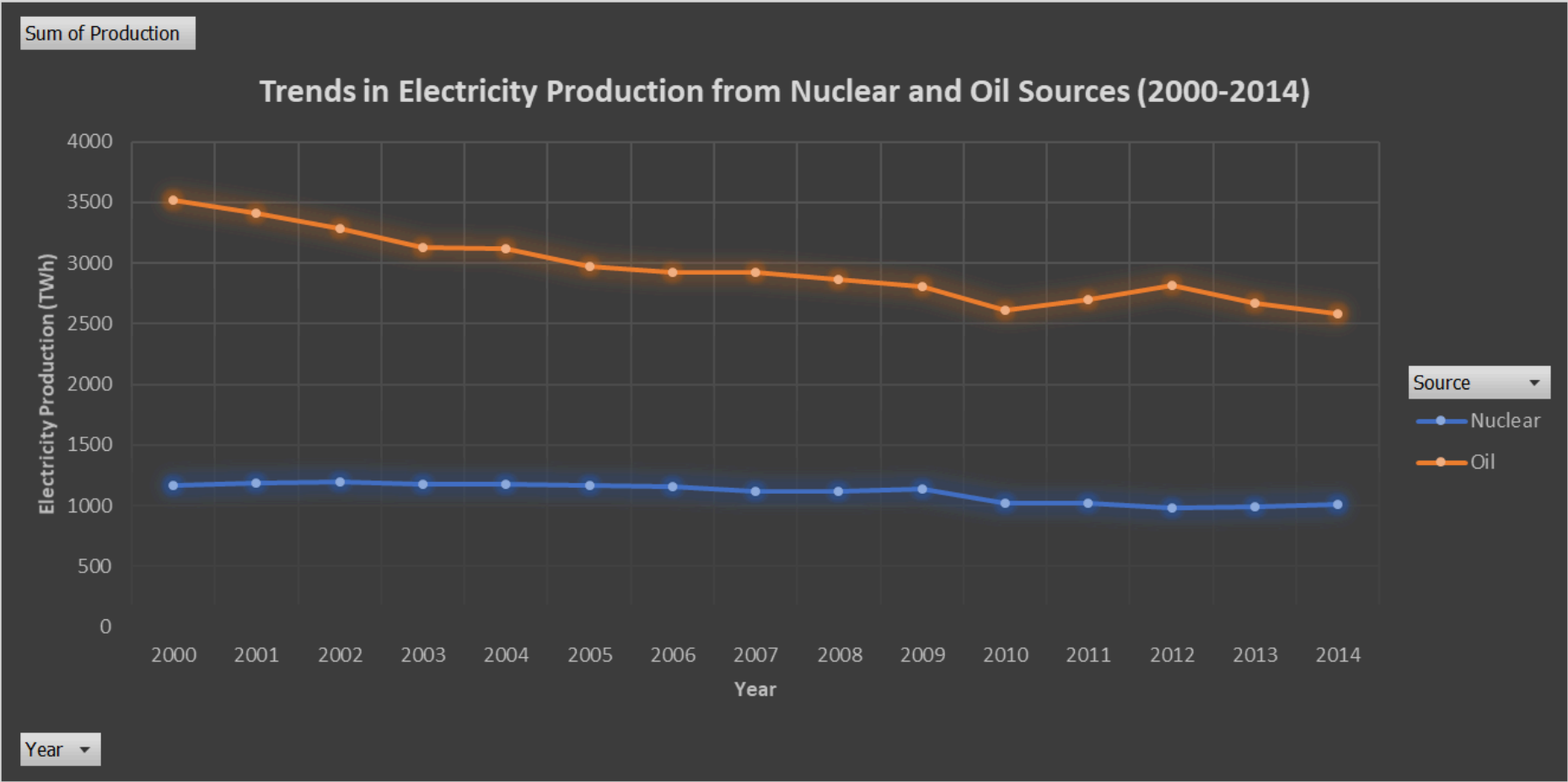
- The data indicates a need for policy adjustments to balance the energy mix across regions. Regions heavily reliant on oil, such as Europe & Central Asia, might consider increasing their investment in renewable sources to align with global sustainability goals.

459.97 billion units, respectively, with a focus more on oil and renewable sources rather than nuclear.

Production Proportions:

- **Europe & Central Asia** has the highest oil production proportion relative to its total production. This suggests a significant reliance on oil as a primary energy source, though it also has a substantial amount of renewable energy production.
- **North America** has a notable proportion of nuclear production, indicating a high dependence on nuclear energy within its total production. This is complemented by a modest share of renewable energy.
- **Sub-Saharan Africa** displays a relatively lower total production, with the majority coming from oil. The proportion of renewable production is relatively low compared to other regions.
- Regions with lower total production but significant renewable energy shares, such as Sub-Saharan Africa, could benefit from increased investments in energy infrastructure to boost their production capabilities while maintaining a focus on renewable energy.

Analysis of Electricity Production Across Different Sources (Nuclear and Oil) from 2000 to 2014



SQL Queries for Data Retrieval

```
SELECT
    Year,
    SUM(CASE WHEN Source = 'Nuclear' THEN Production ELSE 0
END) AS Nuclear,
    SUM(CASE WHEN Source = 'Oil' THEN Production ELSE 0 END)
AS Oil
FROM
    combined_electricity_production_2000_2014
WHERE
    Year BETWEEN '2000' AND '2014'
GROUP BY
    Year
ORDER BY
    Year;
```

Overview of Trends

The provided data offers a comprehensive view of electricity production from two primary sources, nuclear and oil, over the period from 2000 to 2014. A detailed analysis of this data reveals significant trends and shifts in production that can be linked to various global events, technological advancements, and policy changes.

Nuclear Energy Production Trends

Nuclear energy production shows a relatively stable pattern from 2000 to 2008, with slight fluctuations. Production peaked in 2002 at 1199.48 TWh and generally maintained a high level until 2009. However, a noticeable decline is observed from 2010 onwards, with

Oil-Based Electricity Production Trends

In contrast to nuclear energy, oil-based electricity production shows a clear downward trend throughout the entire period. Starting from 3517 TWh in 2000, there is a consistent decline, with production falling to 2579.16 TWh by 2014. Several factors contribute to this decline, including the rising costs of oil, increased environmental regulations, and the global push towards renewable energy sources to combat climate change.

The early 2000s saw significant investments in renewable energy technologies, driven by both governmental incentives and the increasing competitiveness of alternative energy sources such as wind and solar power. As these technologies became more cost-effective and efficient, reliance on oil for electricity production decreased. Additionally, geopolitical events and fluctuations in oil prices may have further discouraged the use of oil for electricity generation.

Comparative Analysis and Real-World Implications

The contrasting trends between nuclear and oil-based electricity production highlight the dynamic nature of the global energy landscape. The initial stability and subsequent decline in nuclear energy production underscore the impact of catastrophic events on public perception and regulatory environments. However, the slight recovery towards the end of the period indicates a potential resurgence in nuclear energy's role in the global energy mix, driven

the lowest production in 2012 at 977.1 TWh. This drop can be attributed to several factors, including the Fukushima Daiichi nuclear disaster in 2011, which led to increased regulatory scrutiny and the shutdown of several nuclear reactors worldwide for safety checks and decommissioning.

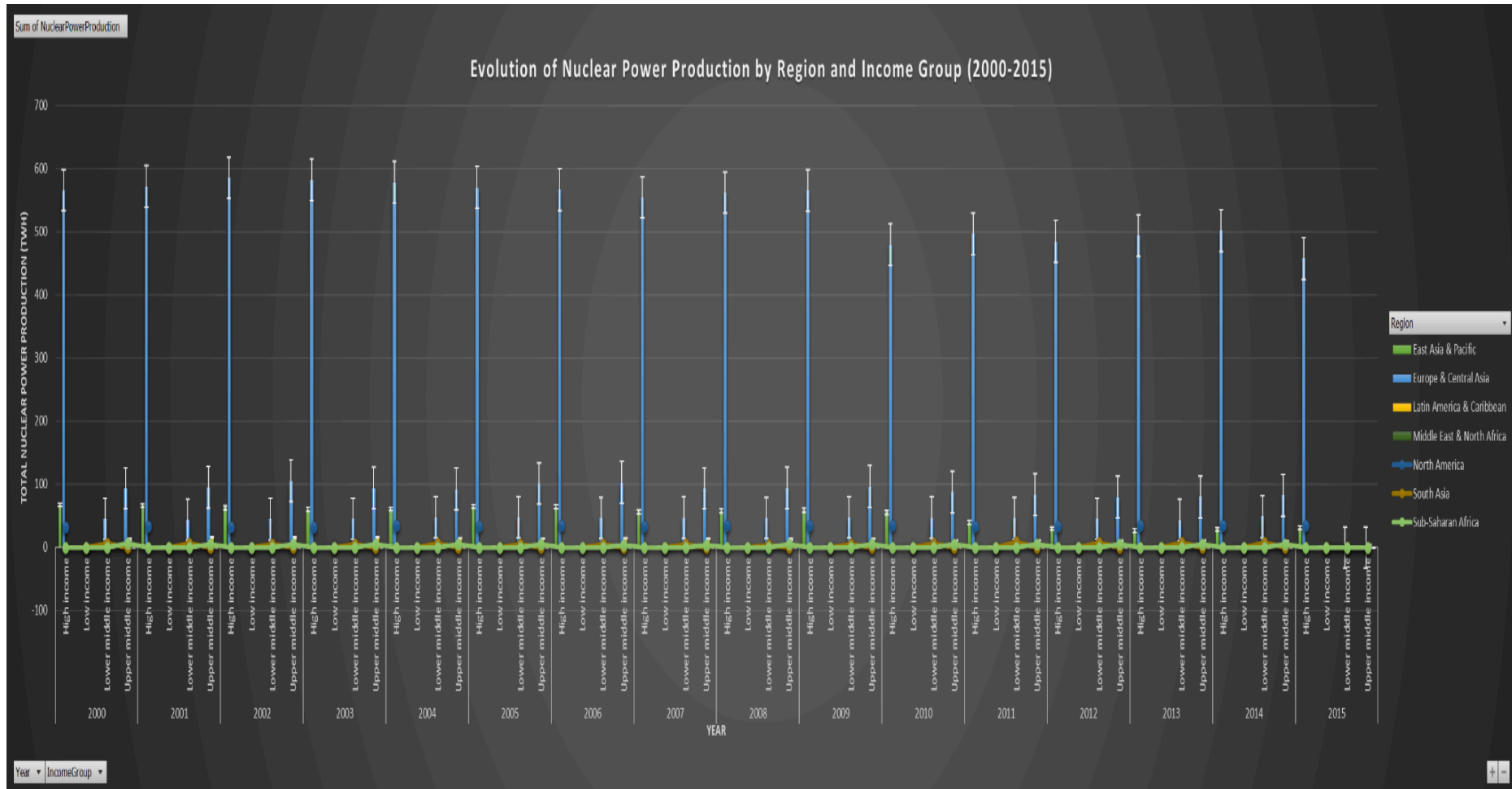
Despite the decline post-2011, nuclear production began to recover slightly towards the end of the period, reaching 1008.85 TWh in 2014. This recovery may be linked to advancements in nuclear safety technology and the resumption of operations in some reactors after rigorous safety upgrades.

by its low greenhouse gas emissions and advancements in reactor technology.

On the other hand, the steady decline in oil-based electricity production reflects a broader shift towards cleaner energy sources. This shift is crucial for addressing global climate change goals and reducing dependence on fossil fuels. The data suggests that countries are increasingly adopting policies that favor renewable energy, which is likely to continue shaping the energy sector in the coming decades.

In conclusion, the analysis of electricity production data from nuclear and oil sources between 2000 and 2014 provides valuable insights into the evolving energy landscape. The trends observed are a result of complex interactions between technological advancements, regulatory changes, economic factors, and societal preferences. Understanding these trends helps policymakers, industry stakeholders, and researchers to make informed decisions that balance energy needs with environmental and safety considerations.

Evolution of Nuclear Power Presence: A Regional and Income Group Analysis (2000-2015)



SQL Queries for Data Retrieval

```
SELECT
    Region,
    IncomeGroup,
    Year,
    SUM(NuclearPowerProduction) AS TotalNuclearPowerProduction
FROM aggregated_nuclear_power_production_2000_2015_long
GROUP BY Region, IncomeGroup, Year;
```

Regional Trends in Nuclear Power Production:

From the data, it is evident that **Europe & Central Asia** consistently had the highest nuclear power production throughout the years, peaking at 735.54 TWh in 2002. This reflects Europe's significant investment in nuclear energy compared to other regions. In contrast, **Sub-Saharan Africa** showed minimal nuclear power production, with figures frequently approaching zero. This disparity highlights the varying levels of nuclear energy infrastructure and investment between developed and developing regions.

East Asia & Pacific demonstrated a steady production rate with minor fluctuations, maintaining a significant presence in nuclear energy but not matching Europe's peak production. **North America** also showed stable nuclear power production, with a peak in 2004 at 34.68 TWh, aligning with its historically robust nuclear energy sector. Conversely, regions like **Middle East & North Africa** and **Latin**

Comparative Analysis of Nuclear Power Generation

Europe & Central Asia:

- **High Production Levels:** Europe & Central Asia has consistently demonstrated high nuclear power production levels throughout the period. For instance, the region peaked at **735.54 TWh** in 2002 and maintained substantial production in subsequent years, with notable levels such as **720.73 TWh** in 2003 and **718.47 TWh** in 2004.
- **Steady Contribution:** The region's contribution remained significant across the years, with production values averaging well above **700 TWh** during the early 2000s and gradually declining but still remaining high compared to other regions.

Sub-Saharan Africa:

- **Minimal Production:** In stark contrast, Sub-Saharan Africa's nuclear power production was extremely low throughout the same period. The region's production often approached zero, with occasional minimal values, such as **6.26 TWh** in 2000 and a peak of **6.26 TWh** in 2004.
- **Negligible Contribution:** The data reflects that Sub-Saharan Africa's nuclear power production was negligible compared to Europe & Central Asia, highlighting the region's minimal investment in or capacity for nuclear energy.

America & Caribbean exhibited negligible nuclear production, indicating a lesser focus on nuclear energy within these regions

Income Group Analysis:

The data reveals distinct patterns in nuclear power production across income groups. High-income countries dominate the nuclear power production landscape, contributing the majority of the global total. For instance, high-income countries accounted for the largest share of production in each year, with a peak of 671.35 TWh in 2001. This aligns with the expectation that high-income countries have more advanced infrastructure and technology for nuclear energy.

Upper middle-income countries have shown an increasing trend in their nuclear power production, reaching up to 127.6 TWh in 2002. However, the production figures for lower middle-income and low-income countries remained consistently low, indicating limited nuclear energy development in these economies. This discrepancy underscores the challenges faced by lower-income countries in investing in nuclear energy, often due to financial and infrastructural constraints.

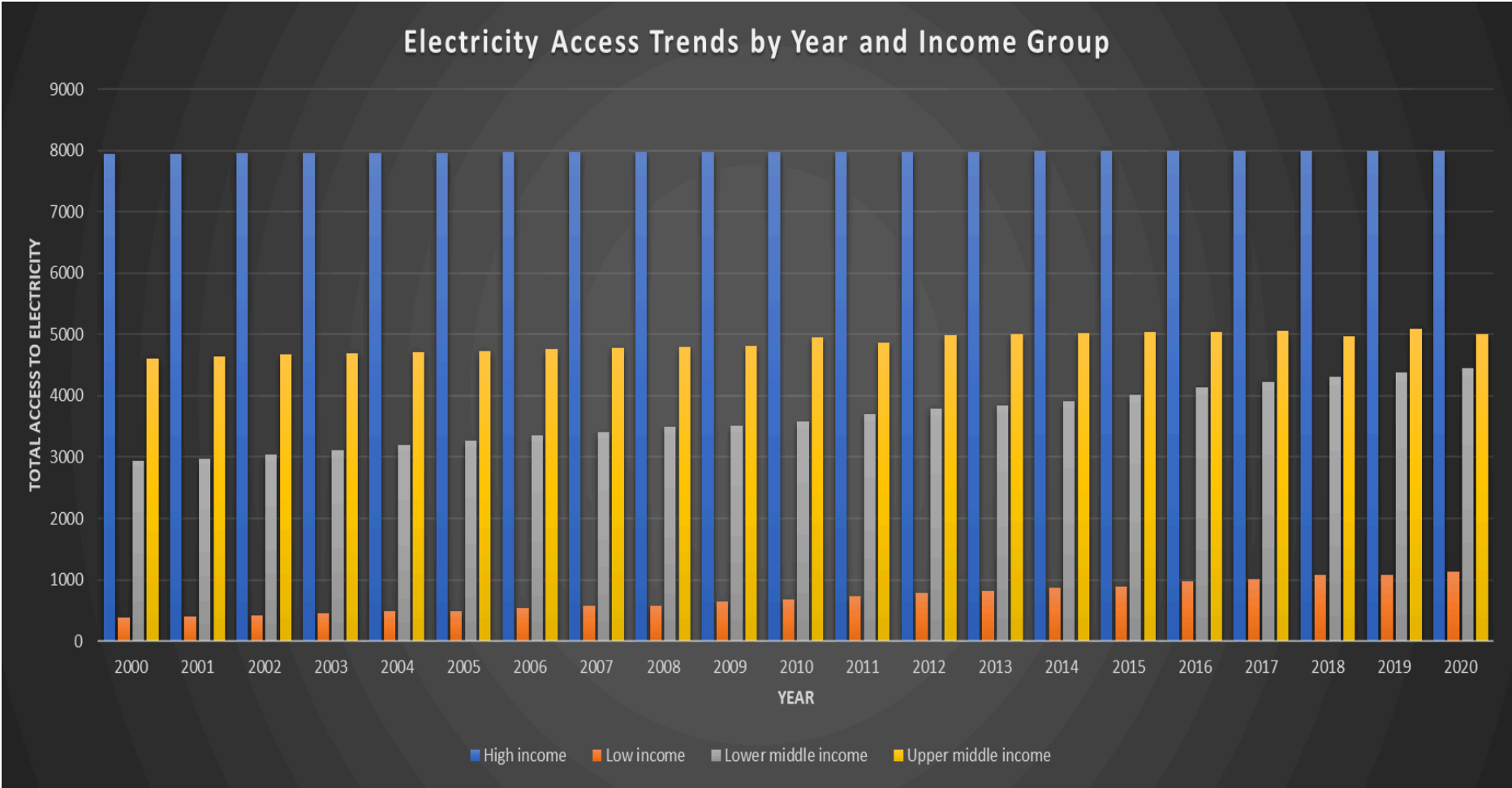
Summary:

Europe & Central Asia has been a major player in nuclear power generation, with consistently high production levels throughout the years analyzed. The region's investment in nuclear infrastructure and technology has enabled it to maintain a leading position in global nuclear power production.

In contrast, **Sub-Saharan Africa** has shown extremely low levels of nuclear power production, reflecting limited or no significant investment in nuclear energy. This disparity underscores the substantial differences in nuclear energy capabilities and infrastructure between developed regions like Europe & Central Asia and developing regions such as Sub-Saharan Africa.

The vast difference in nuclear power generation between these regions highlights the significant global inequality in energy resources and infrastructure, with developed regions having a considerable advantage in nuclear energy production capabilities.

Analysis of Total Access to Electricity by Region and Income Group



SQL Queries for Data Retrieval

```
SELECT
    Year,
    SUM(CASE WHEN IncomeGroup = 'High income' THEN `Total
Access to Electricity` ELSE 0 END) AS `High income`,
    SUM(CASE WHEN IncomeGroup = 'Low income' THEN `Total
Access to Electricity` ELSE 0 END) AS `Low income`,
    SUM(CASE WHEN IncomeGroup = 'Lower middle income' THEN
`Total Access to Electricity` ELSE 0 END) AS `Lower middle income`,
    SUM(CASE WHEN IncomeGroup = 'Upper middle income' THEN
`Total Access to Electricity` ELSE 0 END) AS `Upper middle income`
FROM
    total_access_to_electricity_by_region_income
GROUP BY
    Year
ORDER BY
    Year;
```

The dataset provides insights into the trends in electricity access across different income groups from 2000 to 2020. By analyzing this data, we can identify how access to electricity has evolved globally and across various economic classifications. This information is crucial for understanding the disparities in electricity access and for formulating strategies to address these disparities.

Trends in Electricity Access Over Time

From the data, we observe that high-income regions consistently have the highest levels of electricity access, remaining relatively stable over the years with minimal fluctuations. This stability indicates that high-income countries have maintained robust infrastructure and policies to ensure widespread electricity access. In contrast, low-income and lower middle-income groups show significant improvements over the years, indicating ongoing efforts and investments to enhance electricity access. For instance, low-income regions increased their electricity access from 382.68 in 2000 to 1135.1 in 2020, highlighting a positive trend towards achieving greater energy accessibility.

Regional Disparities in Electricity Access

The data also reveals stark regional disparities in electricity access. High-income regions like Latin America & Caribbean and Europe & Central Asia have nearly universal access to electricity, which is evident from the high values in these categories. On the other hand, regions in South Asia and Sub-Saharan Africa, which predominantly consist of low-income and lower middle-income countries, still struggle with lower levels of electricity access. This disparity underscores the need for targeted interventions and policies to bridge the electricity access gap between high-income and low-income regions.

Implications for Policy and Development

Understanding these trends and disparities is vital for policymakers and development agencies. The positive trends in low-income and lower middle-income regions suggest that existing efforts are yielding results, but there is still a long way to go. Continued investment in

infrastructure, coupled with policies promoting sustainable and renewable energy sources, can help accelerate progress. Additionally, focusing on regions with the lowest access rates can ensure that no population is left behind in the global push towards universal electricity access.

Regional and country groupings

Latin America & Caribbean

Antigua and Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela

Africa Eastern and Southern

Botswana, Comoros, Djibouti, Eritrea, Eswatini, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Somalia, South Sudan, Tanzania, Uganda, Zambia, Zimbabwe

South Asia

Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka

Europe & Central Asia

Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, Uzbekistan

North America

Canada, Mexico, United States

Oceania

Australia, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, New Zealand, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu

Sub-Saharan Africa

Angola, Benin, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Dem. Rep., Congo, Rep., Côte d'Ivoire, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Togo

Middle East and North Africa

Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, Yemen

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