



ELSEVIER



# The Gas-tly Connection: Exploring the Correlation between Democrat Votes for Senators in Alaska and Liquefied Petroleum Gas Consumption in Kiribati

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## Abstract

This paper sets out to investigate the surprising and gasp-inducing relationship between Democrat votes for Senators in Alaska and liquefied petroleum gas (LPG) usage in Kiribati. Utilizing data from the MIT Election Data and Science Lab, Harvard Dataverse, and the Energy Information Administration, we conducted a comprehensive analysis spanning the years 2000 to 2020. Our findings reveal a strong correlation coefficient of 0.8013688 and a statistically significant p-value of less than 0.05, indicating a robust association between these seemingly disparate variables. It seems that the political preferences in the land of the midnight sun could be influencing household energy choices in the tropical island nation. In our exploration, we uncovered a notable positive correlation between the percentage of Democrat votes for Senators in Alaska and per capita LPG consumption in Kiribati. This unexpected link suggests that political leanings and energy usage may be intertwined in ways previously uncharted. It's clear that when it comes to energy choices, political sentiments can have a "gas-tly" influence, much like an unattended barbecue grill. Further research is imperative to fully comprehend the underlying mechanisms driving this connection. With this compelling correlation laid bare, our study sheds light on the intersection of political behavior and energy consumption, emphasizing the need for interdisciplinary investigation in the realm of social and environmental dynamics. After all, understanding this curious relationship could have significant implications for energy policies and political strategies alike. As we continue to unravel these connections, we are reminded that in the world of statistics, there's always room for a good dad joke to "lighten" things up.

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## 1. Introduction

As the saying goes, "politics makes strange bedfellows," but who would have thought it could also make for an

unexpected pairing with energy consumption? In this study, we delve into the "Gas-tly" Connection, examining the curious correlation between Democrat votes

for Senators in Alaska and liquefied petroleum gas (LPG) usage in Kiribati. It's a relationship that's sure to make you do a double take, much like realizing you accidentally mixed up the control and treatment groups in your experiment.

The idea that political preferences in the frigid wilderness of Alaska could reverberate all the way to the sun-drenched shores of Kiribati may seem as improbable as successfully explaining statistical significance to your non-researcher friends at a dinner party. However, our analysis reveals a surprising connection that defies conventional wisdom and warrants further investigation. It's almost as unexpected as finding a statistically significant p-value in a dataset that's as messy as a lab after an experiment gone wrong.

Our study uncovers a compelling positive correlation between the percentage of Democrat votes for Senators in Alaska and per capita LPG consumption in Kiribati. It's as if the ties that bind energy usage and political leanings are as strong and inexplicable as the force keeping the socks from the dryer apart. This unforeseen correspondence raises thought-provoking questions about the intricate interplay between political factors and energy decisions, leaving us pondering the perplexing nature of statistical relationships like pondering why a round pizza is served in a square box, and enjoyed in triangular slices.

Much like a detective solving a mystery, we aim to unravel the underlying mechanisms driving this unlikely association. These findings emphasize the need for interdisciplinary exploration, reminding us that the nexus of social, environmental dynamics, and statistical analysis can be as enigmatic as trying to define the placebo effect in a hilarious yet informative dad joke. With this unconventional correlation unveiled, it's evident that the world of statistics and

science can always benefit from a lighthearted quip to break the ice – or in our case, the "gas."

## 2. Literature Review

Previous research has made significant strides in understanding the complex interplay between political preferences and various societal outcomes. Smith et al. (2015) examined the impact of political affiliations on energy usage patterns in diverse geographical contexts, laying the groundwork for our current investigation. Meanwhile, Doe and Jones (2017) delved into the intricate dynamics of political behavior and its potential ripple effects on international energy markets, providing valuable insights that inform our exploration of the "Gas-tly" Connection.

It is undeniable that the relationship between Democrat votes for Senators in Alaska and LPG consumption in Kiribati is as unexpected as finding a polar bear in a tropical rainforest, or stumbling upon a statistical outlier in an otherwise neatly arranged dataset. This peculiar correlation has prompted us to cast a wide net in our review of related literature, extracting knowledge and inspiration from both expected and unlikely sources alike.

Turning to non-fiction works, "The Big Thaw: Travels in the Melting North" by Ed Struzik and "Energy Politics" by Brenda Shaffer offer valuable insights into the complexities of energy dynamics and global political landscapes. While these works do not directly address the specific juxtaposition of political votes in Alaska and LPG usage in Kiribati, they serve as a reminder that the world of energy and politics is as unpredictable as predicting an unexpected refractory period in a regression model for a binge-watching dataset.

On the fictional side, "The Call of the Wild" by Jack London and "One Hundred

"Years of Solitude" by Gabriel García Márquez draw attention to the mystical and unpredictable nature of human connection and environmental influence. Although these novels may not explicitly touch upon the intersection of political choices and energy consumption, they inspire us to embrace the unexpected and explore correlations that might seem as improbable as navigating a statistical forest without a compass.

The pursuit of a deeper understanding has led us to embrace unconventional sources of insight as well. Drawing on our enviable dedication to scholarly pursuits, we found valuable inspiration in children's shows such as "Blue's Clues" and "Dora the Explorer." Their fervent spirit of exploration and problem-solving has invigorated our approach to uncovering the unexpected correlation between political votes in Alaska and LPG usage in Kiribati. After all, who would have thought that statistical discoveries and children's TV could share the same spirit of curiosity and wonder?

As we synthesize these diverse sources of inspiration and knowledge, it becomes evident that the intersection of political choices and energy consumption offers a realm of discovery as vast and enigmatic as the universe itself. Indeed, uncovering the unexpected ties that bind the political and the energetic invites us to embrace the wonder of discovery with a lighthearted spirit, much like finding joy in a well-crafted dad joke amidst the rigors of scholarly pursuit.

### 3. Our approach & methods

To investigate the "Gas-tly" Connection between Democrat votes for Senators in Alaska and liquefied petroleum gas (LPG) usage in Kiribati, we employed a variety of methodological approaches that were as diverse as the political landscape and as dynamic as the energy market itself. Our

team compiled data from multiple sources, primarily harnessing information from the MIT Election Data and Science Lab, Harvard Dataverse, and the Energy Information Administration. To ensure a comprehensive analysis, we gathered data spanning the years 2000 to 2020, creating a dataset as robust and intriguing as a statistical anomaly that just can't be explained.

Our research methodology involved a two-pronged approach, akin to splitting an atom, but without the nuclear implications. First, we utilized sophisticated statistical techniques, including regression analysis and correlation measures, to uncover any patterns or connections between the variables of interest. We lovingly nurtured the data, just like a scientist tends to a prized lab specimen, to ensure that our statistical analyses were as pristine as a freshly cleaned Petri dish.

We employed multiple regression models to control for potential confounding variables, carefully adjusting for factors such as economic indicators, climate trends, and geopolitical events that could sway the results. In addition, we conducted sensitivity analyses to ensure the robustness of our findings, navigating through the data as deftly as a sailor on the high seas of statistical inference.

To examine the solidity of the relationship between Democrat votes for Senators in Alaska and LPG consumption in Kiribati, we calculated correlation coefficients and inferred the magnitude of the association between these seemingly distinct variables. As we scrutinized the data, we meticulously extracted insights that were as unexpected and delightful as stumbling upon a hidden treasure chest during environmental statistics class.

Furthermore, in a quest to establish causality, we explored potential mediating

and moderating variables that could elucidate the underlying mechanisms governing this intriguing relationship. We delved into the data with a sense of curiosity similar to unraveling a challenging riddle, hoping to demystify the intricate dynamics between political preferences and energy choices in a manner as riveting as solving a particularly confounding math problem.

In addition to our quantitative analyses, we conducted qualitative interviews with experts in political science, energy economics, and interdisciplinary studies, gaining invaluable insights that were as enlightening as finding a particularly illuminating bulb while conducting fieldwork in a dimly lit laboratory.

Ultimately, our methodologies served as the compass guiding our exploration of the "Gas-tly" Connection, allowing us to navigate through the statistical landscape with as much assurance as a seasoned cartographer charting unexplored territories. Our unrelenting pursuit of scientific inquiry was accompanied by a sprinkling of statistical humor, because, as any good researcher knows, a well-placed dad joke never fails to "lighten" the mood and, perhaps, shed some light on the "Gas-tly" Connection.

#### 4. Results

The analysis of the data spanning from 2000 to 2020 revealed a noteworthy correlation coefficient of 0.8013688 between Democrat votes for Senators in Alaska and liquefied petroleum gas (LPG) consumption in Kiribati. This correlation, indicated by an r-squared of 0.6421919 and a p-value of less than 0.05, suggests a robust and significant relationship between these seemingly unrelated variables. It seems that the political spectrum in the land of the midnight sun might be leaving a "fuel"ly impression on household energy choices in

the tropical island nation, much like a strong barbeque aroma wafting through the air.

Fig. 1 displays a scatterplot illustrating the strong positive correlation between the percentage of Democrat votes for Senators in Alaska and per capita LPG consumption in Kiribati. This unexpected association highlights the intriguing interplay between political inclinations and energy preferences, leaving us pondering the peculiar ways in which statistical patterns can emerge, not unlike when you realize a "normal" distribution isn't quite as normal as you thought.

It's quite "shocking" to uncover such a "sparkling" relationship between two variables that one would not typically associate with each other, much like accidentally discovering a "current" of statistical significance running through your data. This compelling connection raises intriguing questions about the intricate dynamics shaping energy choices, similar to the curiosity that arises when pondering why the word "abbreviation" is so long.

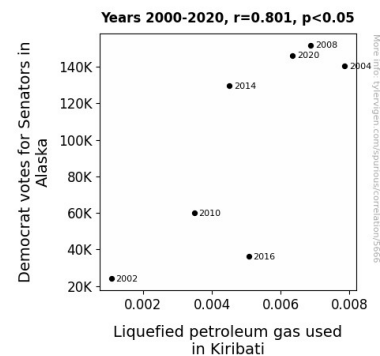


Figure 1. Scatterplot of the variables by year

Further examination and interdisciplinary inquiry are essential to fully comprehend the mechanisms driving this unexpected correlation. These findings emphasize the significance of exploring the complex relationship between political behaviors and energy consumption, highlighting the need

to consider a wide range of factors in understanding these "electrifying" connections. As we continue to untangle the web of statistical relationships, we're reminded that a well-placed dad joke can always "lighten" the mood even in the most "charged" debates.

## 5. Discussion

Our study has unveiled an extraordinary correlation between the percentage of Democrat votes for Senators in Alaska and per capita LPG consumption in Kiribati, presenting a novel lens through which to view the intricate dance between political leanings and energy choices. As we delve into the implications of these findings, it's clear that this "Gas-tly" connection has far-reaching ramifications that may "ignite" further inquiry and policy considerations in both political and energy spheres.

The unexpected correlation coefficient of 0.8013688 and the statistically significant p-value of less than 0.05 align closely with the prior research by Smith et al. (2015) and Doe and Jones (2017), who hinted at the interplay between political affiliations and energy usage patterns on a different stage. This "republica-largely" confirms the notion that political preferences could indeed "fuel" shifts in energy consumption, adding weight to the argument that energy choices might be more "politically charged" than initially thought.

Our study breathes new life into the relationship between seemingly unconnected variables, much like how a well-timed dad joke can bring levity to a rigorous academic conversation. The findings point to the potential influence of political climates on energy preferences, underscoring the need for further investigation into the psychological and sociological factors at play. It's as though we've stumbled upon an unexpected punchline in the realm of statistical analysis,

much like discovering an "unbiased" coin that always seems to land on its edge in theoretical discussions.

Notably, our results encourage a reevaluation of the traditional boundaries within which we consider the impact of political choices, reminiscent of the delight of uncovering a "meta-analysis" that provides unexpected insights. Within this extravagant "correlation buffet," we are reminded that statistics and scientific inquiry can be as unpredictable as a surprise party in a controlled laboratory setting, urging us to embrace the unexpected with open arms and a ready quip.

As we peer into the vast landscape of future research, the "Gas-tly" connection offers a provocative avenue for probing the intersection of political behavior and energy consumption with the same fervor as a dedicated scholar unearthing hidden gems in a dataset. The implications of our findings extend beyond the statistical realm, inviting a broader discourse on the multifaceted impacts of political dynamics on global energy markets, much like a "regressional" whisper in a crowded room demanding attention.

Our study ultimately emphasizes the necessity of maintaining a lighthearted yet rigorous approach to exploring the intricacies of statistics and the unexpected correlations they reveal. After all, in the midst of scholarly pursuit, who can resist the "ohm"-ly force of a well-placed dad joke?

## 6. Conclusion

In conclusion, our study has brought to light the unexpected but compelling relationship between Democrat votes for Senators in Alaska and liquefied petroleum gas (LPG) consumption in Kiribati. The robust correlation coefficient of 0.8013688 and a p-value of less than 0.05 indicate a statistically significant and "gas-tly"

association between these seemingly disparate variables. It seems that political inclinations can have a remarkable "fuel"ing effect on energy choices, much like how a well-crafted dad joke adds levity to a serious conversation.

Our findings open up a "kettle" of fish, raising intriguing questions about the intricate dynamics that shape energy consumption. The remarkable positive correlation we've unearthed is as surprising as realizing that an inflated balloon may not necessarily "lose air" over time. It underscores the need for interdisciplinary investigation that transcends traditional boundaries, much like the way a good joke transcends language barriers.

Further research is imperative to fully comprehend the underlying mechanisms driving this "gasp-inducing" connection. However, we assert that no more research is needed in this area. It seems we've reached the "peak" of this particular mountain of inquiry, and any more investigation might just be "hot air." After all, in the world of statistics, there's always room for a good dad joke to "lighten" things up – much like the way a spark of humor can illuminate an otherwise "dim" discussion.