**Abstract Submission (Word Document)**

**Research Topic Title:** Gas Natural in Canada (Exportations and Importations) across last years and future.

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**Abstract:** Across years and years Canada has been one of the top ten countries as a natural gas supplier for many countries around the world. Nevertheless, the last decisions around the environment in the world have been turning to change on how people see and use this natural resource (specially in developed countries). As a consequence of these actions, Canada has been affected.

To figure out how these changes have appeared in Canada, I browsed the Web for information on exportations and importations in the last decades. Around the information of natural gas, we make diverse questions

1. How have export and import natural gas varied across years in Canada? Is there any pattern?
2. How has the price fluctuated over years? How did this affect Canada?
3. Which are the top regions who buy natural gas? Have they changed across years?
4. What will natural gas fluctuate in the next few years?
5. Is there any significant cluster defined by import/export volume which expresses relevant information?
6. Regarding some regions who buy natural gas from Canada. The next few years, will they have changed?

All of these questions will be tried to answer by analyzing the dataset with two tools, R and/or Python.

**Research methods:**

1. Data sanity check
   1. Handle formatting, structure of the dataset;
   2. Handle duplicates observations;
   3. Handle missing values;
   4. Handle outliers;
2. Transformation
   1. Subset of variables and/or observations of interest;
3. Model
   1. Data aggregation and summarization;
   2. Descriptive statistics;
   3. Predictive analysis;
4. Visualization
5. Evaluation
6. Conclusion

**Objectives:**

* Find the behaviour of the natural gas market in Canada in the last few years.
* Define the top five countries who buy natural gas from Canada.
* Define the top five regions who provide natural gas in Canada.
* Predict the fluctuation of importation/exportation of natural gas over the next few years.

**Conclusion:**

To sum up, I would like to show information regarding natural gas resources from Canada and how it has been decreased by diverse factors, national and international, in the wake of presenting predictions about its future. Ending with recommendations to companies in regard with this market, on what they can do to face it.