Team Number:	apmcm2300201
Problem Chosen:	C

2023 APMCM summary sheet

New energy vehicles have gained widespread popularity since their introduction, due to their advanced technology, low fuel consumption, and alignment with the global carbon peak and carbon neutrality goals around the world. This paper extensively gathers data on new energy vehicles, traditional fuel-powered cars, and related information. Finally, a series of mathematical models to describe the development of new energy vehicles are established.

For problem 1,

NOTE that data should be demonstrated here.

For problem 2,

Ultimately, we provide a summary of the data and mathematical models employed in this study and look ahead to potential future works.

Keywords: New energy vehicles Keywords2 Keywords3

Contents

I. Introduction

New energy vehicles integrate transformative technologies such as new energy sources, new materials, and various disruptive technologies like the internet, big data, and artificial intelligence. This integration propels the transformation of energy, transportation, and information communication infrastructure, fostering an optimized energy consumption structure, elevating the intelligence level of transportation systems and urban operations. This advancement holds significant importance in constructing a clean and beautiful world, and in building a shared future for humanity.

The widespread adoption of new energy vehicles holds particular significance for China. With a large population, China faces substantial carbon emissions from automobiles. The popularization of new energy vehicles will greatly reduce China's energy expenditure and stands as a robust initiative toward achieving ecological civilization.

Within the realm of new energy vehicles, the development of new energy electric vehicles has been particularly rapid. This is primarily due to their low pollution and low energy consumption characteristics. Additionally, new energy electric vehicles typically offer a affordable price, thus enjoying a broad market in China.

This paper collects comprehensive data on China's new energy electric vehicles, including their sales volume, growth rates, traditional car sales, export quantities, and China's policies supporting new energy vehicles. Further, this paper employs methods such as **xx** and **xx** to model and analyze the development of China's new energy electric vehicles and their associated impacts.

II. The Description of the Problem

In this chapter, we conducted a detailed analysis of six problems related to the development of new energy vehicles and provided approaches to address these problems.

2.1 Question 1

2.2 Question 2

2.3 Question 3

2.4 Question 4

2.5 Question 5

2.6 Question 6

III. Models

3.1 Model for Question 1

3.1.1 *Terms, Definitions and Symbols*

% introduce $Terms, Definitions, Symbols$ used in this model.

3.1.2 *Assumptions*

3.1.3 *Data preparation*

3.1.4 *The Foundation of Model*

% Establish mathematical model here.

3.1.5 *Solution and Result*

% Solve mathematical model here.

3.1.6 *Analysis of the Result*

% Conclude here.

3.1.7 *Strength and Weakness*

% Optional

Strength: Strength.

Weakness: Weakness.

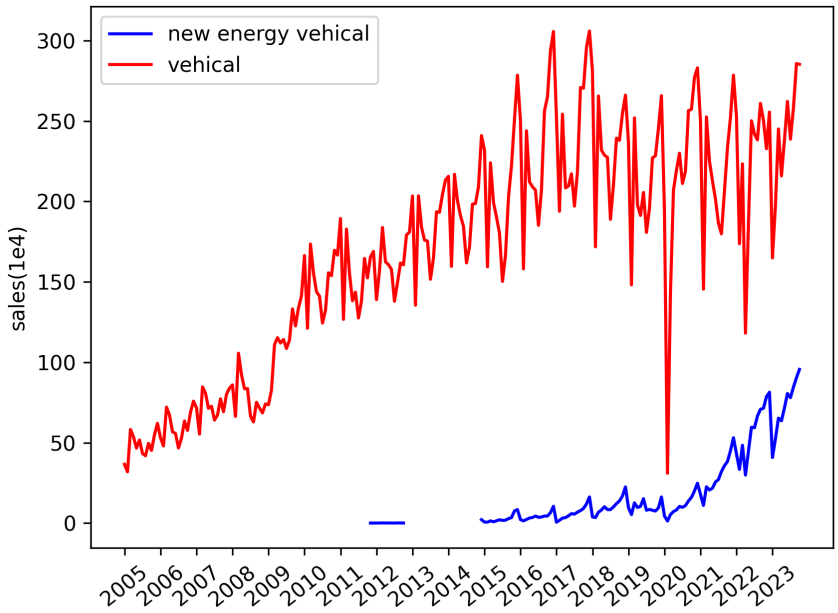

Figure 1 Original data.

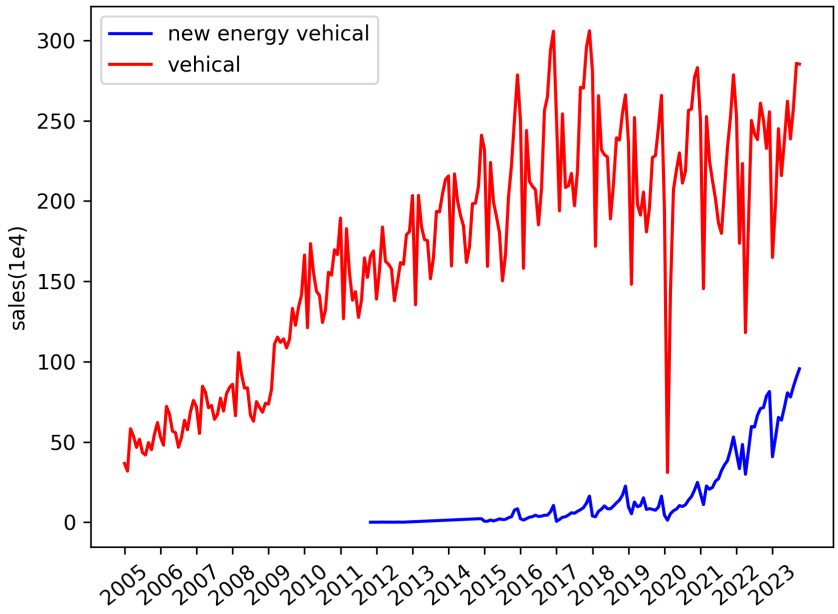

Figure 2 Processed data.

3.2 Model for Question X

3.2.1 *Terms, Definitions and Symbols*

% introduce $Terms, Definitions, Symbols$ used in this model.

3.2.2 *Assumptions*

3.2.3 *Data preparation*

3.2.4 *The Foundation of Model*

% Establish mathematical model here.

3.2.5 *Solution and Result*

% Solve mathematical model here.

3.2.6 *Analysis of the Result*

% Conclude here.

3.2.7 *Strength and Weakness*

% Optional

Strength: Strength.

Weakness: Weakness.

IV. Conclusions

4.1 Conclusions of the problem

4.2 Methods used in our models

4.3 Applications of our models

V. Future Work

5.1 Advanced models

% Optional. 如果希望模型完成更多功能，将期望的功能写在这里，当作对未来模型的展望。

5.1.1 *model 1*

5.2 Data collection

% Optional. 如果认为可以收集更多样化的数据，可以将期望的数据描述在这里。

5.2.1 *data 1*

VI. References

[1] Author, Title, Place of Publication: Press, Year of publication.

[2] author, paper name, magazine name, volume number: starting and ending page number, year of publication.

VII. Appendix

Listing 1: Data source

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1. The brands of new energy electric vehicles that hold the largest
   market share.
http://cpcaauto.com/newslist.php?types=csjd&id=3273
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