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| COMPUTER APPLICATIONS TECHNOLOGY-PAT  Green Jobs in Sustainable Transport | Abstract  This investigation explores the role in green jobs in advancing sustainable transport. It addresses the major contributions of the transportation sector to greenhouse gas emissions and examines the demand for sustainable transportation solutions. The study aims to provide insights of how green jobs can mitigate environmental degradation and promote environmental stewardship  Sisekelo Brian Zulu  Highveld Secondary School |

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# INTRODUCTION

In an era marked by escalating environmental concerns and the urgent need for sustainable solutions, the transportation sector stands at the forefront of change. With traditional modes of transportation exerting significant strain on the environment, the imperative to transition towards greener alternatives has never been pressing. This paradigm shift not only presents challenges but also unrivalled opportunities, particularly in the realm of green jobs within the sustainable transport sector.

The aim of the Practical Assessment Task (PAT) is to investigate the intersection of sustainable transport and green employment, exploring the pivotal role that green jobs play in advancing environmental sustainability while fostering economic development. Through meticulous research, analysis, and inquiry, this investigation seeks to shed light on the multifaceted landscape of green jobs in sustainable transportation and their potential to drive potential change.

By delving into the current state of sustainable transport, examining the challenges and opportunities it presents, and elucidating the diverse array of green job opportunities within this sector, this PAT endeavours to provide a comprehensive understanding of the critical nexus between sustainable transportation and employment. Ultimately, this investigation aims to not only inform but also inspire action, propelling us towards a future where transportation is not only efficient and accessible but also environmentally sustainable and socially equitable.

# TASK DEFINITION

The transportation sector is a major contributor to greenhouse gas emissions, contributing significantly to global climate change. Traditional transportation methods, heavily reliant on fossils fuels, have resulted in increased pollution and environmental degradations. As the awareness of these issues grow, there is rising demand for sustainable transportation solutions that reduce carbon footprints and promote environmental stewardship. This investigation is conducted to address these pressing concerns by exploring the role of green jobs in advancing sustainable transport.

The focus of this investigation is to explore various green jobs within the sustainable transport sector, such as public transport operators, green transportation planners, and electric vehicles technicians. The purpose is to highlight the significance of these roles in promoting environmentally friendly transportation solutions and to identify the skills and qualifications required for individuals to thrive in these positions. By providing a comprehensive overview of green jobs, this investigation aims to underscore their importance in mitigating environmental impact while creating employment and fostering economic growth.

To approach this task, a structured methodology will be employed. This investigation will begin with a thorough review of the PAT requirements to ensure all aspects are covered. Data and information will be collected from credible sources, including academic journals, government publications, and industry reports. Surveys and questionnaires will be designed to gather primary data from stakeholders in the sustainable transport sector. This data will be processed using spreadsheet software for analysis and further manipulated using queries and reports in a database. This investigation will also include case studies and interviews with professionals in the fields to gain practical insights. Throughout the process, data integrity and ethical considerations will be maintained.

The target audience for this investigation includes policymakers, environmental organizations, transportation agencies, educators, and individuals interested in pursuing careers in sustainable transport and green technology. Policymakers can use the finding to develop informed strategies and policies to support green job creation in the transport sector. Environmental organizations and transportation agencies can leverage the insights to advocate for and implement sustainable transportation solutions. Educators can utilize the information to guide students towards green careers, and job seekers can benefit from the understanding the opportunities and requirements within the sustainable transport sector.

# FOCUS QUESTION

**How can the promotion of green jobs within the sustainable transport sector contribute to mitigating environmental impact and fostering economic growth?**

# DISCUSSIONS & ANALYSIS

# FINDINGS

# CONCLUSION

# BIBLIOGRAPHY

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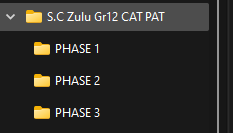
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# APPENDICES

Appendix A: Folder Structure



Appendix D: Questions & Sources Table

|  |  |  |  |  |  |  |  |  |  |
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| NO. | QUESTION | QUESTION  LEVEL  (1,2,3,4) | CATEGORY | TYPE OF SOURCE | BIBLIOGRAPHICAL INFORMATION | | QUALITY OF INFORMATION FOUND | | SUMMARY OF  INFORMATION FOUND |
| 1 | What are green jobs in the context of sustainable transportation? | 1 | ... | **Internet/ Website** | **Author(s)** | J.Q Quintell | **Authority** |  | **<Hyperlink 1>** |
| **Name of**  **Website/**  **Web Page** | Job Creation through Green Transport. | **Currency** | … |
| **Date created/update** | September 2021 | **Accuracy** | … |
| **Date accessed** | 25 June 2024 | **Objectivity** | … |
| **URL** | Greenpolicyplatform.org | **Coverage** | … |
| 2 | What roles do electric vehicles technologies play in the sustainable transportation. | 1 | ... | **Magazine** | **Author(s)** | Samuel T. Browns | **Authority** | Samuel T. Browns is a well-known environmental engineer with expertise in clean technologies, adding credibility to the article | **<Hyperlink 2>** |
| **Title** | Cleantech Insights | **Currency** | Published in 2022, the information is up-to-date, particularly for the rapid development of EV technologies |
| **Date published** | 2022 | **Accuracy** | This source draws from several reliable industry reports and government statistics. |
| **Publisher** | Future Mobility Media | **Objectivity** | The article offers a balanced view of the pros and cos of electric vehicles |
| 3 | What qualifications and skills are typically required for a career as a green transportation planner? | .1 | ... | **Internet/ Website** | **Author(s)** | Dr. Karen M. Delgado | **Authority** | Dr Karen has a PhD in Urban Planning and over ten years of experience in green job development | **<Hyperlink 1>** |
| **Name of**  **Website/**  **Web Page** | Sustainable Careers Network | **Currency** | Published in 2023, the content is very current and reflective of today’s green job market needs. |
| **Date created/update** | 2024 January 17 | **Accuracy** | The qualifications and skills listed match those found in government and educational guidelines for green jobs. |
| **Date accessed** | 06 August 2024 | **Objectivity** | The article remains neutral, offering clear and unbiased details on required qualification. |
| **URL** | www.sustainablecareers.org/green-transportation-planer-skills | **Coverage** | It covers the necessary qualifications in detail, including educational and technical skills. |
| 4 | How does the adoption of sustainable transport methods impact urban air quality? | .2 | ... | **Magazine** | **Author(s)** | Michael L. Chong | **Authority** | Michael is an environmental scientist who specializes in air quality studies. | **<Hyperlink 2>** |
| **Title** | Urban Eco Transport | **Currency** | Published in 2021, the data is slightly older but still relevant to the ongoing impacts of sustainable transport. |
| **Date published** | 2021 | **Accuracy** | The information is backed by city-level air quality monitoring reports and aligns with academic research. |
| **Publisher** | Green Cities Media | **Objectivity** | The article Is well-balanced, with no signs of bias toward any specific method of sustainable transport. |
| 5 | What are the key differences between traditional public transport systems and sustainable public transport systems? | 2 | ... | **Internet/ Website** | **Author(s)** | Linda S. Harrington | **Authority** | Harrington is an urban transit planner with over 15 years of experience in sustainable mobility solutions. | **<Hyperlink 1>** |
| **Name of**  **Website/**  **Web Page** | Transit Innovations | **Currency** | The website was published in 2023, keeping it highly relevant to current transportation discussions |
| **Date created/update** | 2023 | **Accuracy** | The key differences well-documented, with comparisons backed by transportation industry data |
| **Date accessed** | September 16, 2024 | **Objectivity** | The article provides an objective comparison without favouring either system |
| **URL** | https://  www.transitinnovations.org/traditional -vs-sustainable-public-transport | **Coverage** | It covers energy consumption, emissions, and infrastructures costs in both traditional and sustainable systems. |

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| 6 | How have government policies influenced the growth of green jobs in the transportation sector? | 2 | ... | Magazine | Author(s) | Dr. Andrew G. Daniels | Authority | They are professors of environmental policy, making them a credible authority on this topic. | <Hyperlink 2> |
| **Title** | Policy & Green Jobs Journal | **Currency** | The information reflects the most recent policy changes and trends. |
| **Date published** | 2024 | **Accuracy** | The article is based on legislative reports and economic data, making it highly reliable. |
| **Publisher** | Green Work Publications | **Objectivity** | The analysis is neutral, focusing on the effects of policy without political bias. |
| 7 | What if cities worldwide adopted sustainable transport solutions universally? | 3 | ... | **Internet/ Website** | **Author(s)** | Patricia J. O’Connell | **Authority** | Patricia is a recognised urban planner and climate strategist. | **<Hyperlink 1>** |
| **Name of**  **Website/**  **Web Page** | Global Green Cities | **Currency** | Published in 2023, the content is recent and considers current global trends |
| **Date created/update** | 2023 | **Accuracy** | The article uses case studies from cities that have adopted sustainable solutions, ensuring accuracy |
| **Date accessed** | 01 July 2023 | **Objectivity** | The article speculates on future outcomes but remains grounded in real-world examples. |
| **URL** | https://www.globalgreencities.com/universal-adoption-sustainable-transport | **Coverage** | The piece thoroughly covers potential; economic, environmental, and social impacts of universal adoption. |
| 8 | How might the job market change if there is a significant increase in green jobs within the sustainable transportation sector? | .3 | ... | **Magazine** | **Author(s)** | Emily R. Thompson | **Authority** | Emily R. Thompson is an economist specialising in labour markets and green technology. | **<Hyperlink 2>** |
| **Title** | Green Economy Reports | **Currency** | The article is very current and relevant to the rapidly changing job market. |
| **Date published** | 2024 | **Accuracy** | Emily R. Thompson is an economist specialising in labour markets and green technology. |
| **Publisher** | Future Work Studies | **Objectivity** | The piece represents potential market changes without over-hyping green jobs. |
| 9 | To what extent do green jobs in sustainable transport contribute to reducing carbon emission? | 4 | ... | **Internet/ Website** | **Author(s)** | Brian K. Lee | **Authority** | Brian K. Lee is a researcher in environmental technologies with expertise in transportation emissions | **<Hyperlink 1>** |
| **Name of**  **Website/**  **Web Page** | Eco-Transportation Research | **Currency** | The information is still relevant but may need updating with newer data. |
| **Date created/update** | 2022 | **Accuracy** | The article references emission reduction studies conducted by the UN and other global organizations |
| **Date accessed** | 12 September 2024 | **Objectivity** | The analysis remains balanced, presenting realistic emission reductions without exaggeration. |
| **URL** | https://www.ecotransportation.com/green-jobs-carbon-reduction | **Coverage** | It covers the extent to which jobs contribute to emission reduction across different transport sectors. |
| 10 | What are the economic benefits of promoting green jobs in the sustainable transport sector? | 4 | ... | **Magazine** | **Author(s)** | Oliver P. Harris | **Authority** | Oliver P. Harris is an economic analyst with a focus on sustainable infrastructure. | **<Hyperlink 2>** |
| **Title** | Sustainable Mobility Economics | **Currency** | The article is relevant and reflects current economic analyses |
| **Date published** | 2023 | **Accuracy** | The article uses data from financial reports and government incentives to support its claims. |
| **Publisher** | Green Financial Times | **Objectivity** | The economic benefits are presented factually, without over-selling the potential gains. |

Appendix C: Learner Declaration of Authenticity

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| Learner name | Sisekelo Zulu | | ID Number | 0611176376089 |
| Grade | 12 | | **Year** | 2024 |
| Subject | Computer Applications Technology | | | |
| Practical Assessment Task (PAT) | | | **Teacher** | Nkosi S. A |
| Did you receive any help/information from anyone to complete this project?  No 🞩 Yes (provide details below) | | | | |
| Help/Information received from (person): | | Nature of the help/information (provide evidence): | | |
|  | |  | | |
| I hereby declare that the contents of this assessment task are my own original work (except where there is clear acknowledgement and appropriate reference to the work of others) and that I have not plagiarised, copied from someone else or used work previously submitted for assessment by anyone.      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_ / \_\_\_ / 2024  SIGNATURE OF LEARNER DATE | | | | |

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