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EFFECTIVENESS OF AIR POLLUTION INDEX TO OVERCOME  
AIR POLLUTION IN URBAN AREA

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## **ABSTRACT**

Air pollution has been an ongoing problem in many countries in the Southeast Asian region, with Malaysia being one of the worst affected countries. It is really bad that the country is leading the world in unfavourable statistics. Following the recent outbreak, Malaysia has risen to the top of the list of nations with the worst levels of global air pollution. World Air Quality Index (WAQI) conducted an observational search for air pollution index (API). One of the reasons everything happened was it is all because of human being and others contributor that may harm the environmental. This has led to many effects to environmental that may be fatal to people that are occupied in the area. Peoples are currently facing major obstacles related to their living environment. This study is to identify effectiveness of air pollution index to overcome air pollution in urban area. There are three research objectives related to the purpose of the study. Firstly, it is to determine causes of air pollution in urban area in Malaysia. Second, it is also to analyse in detail regarding air pollution index in Malaysia. Third, it is also to identify how air pollution index can reduce air pollution in urban area. The quantitative method was chosen as the research tool for this study. It is done by handing out questionnaires to respondents in the case study region. This research analyses all the data given by respondents using a descriptive analysis, charts and also table. All of this test was fully analysing by tools of Microsoft Office Excel. Simply put, this study will help everyone increase their awareness regarding air pollution in urban area and also the awareness of existence and function of Air Pollution Index (API).

## TABLE OF CONTENTS

<b>ACKNOWLEDGEMENT</b> .....	iii
<b>ABSTRACT</b> .....	iv
<b>TABLE OF CONTENTS</b> .....	v
<b>LIST OF FIGURES</b> .....	viii
<b>LIST OF TABLES</b> .....	ix
<b>LIST OF ABBREVIATIONS</b> .....	x
<b>CHAPTER 1:</b> .....	1
<b>INTRODUCTION</b> .....	1
1.1 Research Background .....	1
1.3 Aim and Objective .....	3
1.4 Scope and Limitation .....	3
1.5 Research Methodology .....	4
<b>CHAPTER 2:</b> .....	6
<b>LITERATURE REVIEW</b> .....	6
2.1 Introduction .....	6
2.2 Air Pollution Cases in Worldwide .....	7
2.3 Air Pollution in Malaysia .....	8
2.3.1 Death rates by Air Pollution Cases in Malaysia .....	12
2.4 Causes of Air Pollution .....	14
2.4.1 Industry .....	15
2.4.2 Vehicle Emissions .....	16
2.4.3 Household and Farming Chemicals .....	17
2.4.4 Deforestation .....	17
2.5 Air Pollution Index (API) in Malaysia .....	18
2.5.1 API Description .....	19
2.5.2 Calculation of Air Pollution Index (API) .....	20
2.6 Reducing Air Pollution using API .....	23
2.6.1 Air Quality Status and Its Effects .....	24
2.6.2 Particulate Matter Control .....	26
2.6.3 Urban Air Quality and Green Infrastructure .....	27

<b>CHAPTER 3:</b> .....	28
<b>RESEARCH METHODOLOGY</b> .....	28
3.1 Introduction .....	28
3.2 Literature Review .....	29
3.3 Data Collection Approach .....	29
3.4 Quantitative Method.....	29
3.5 Survey Method .....	30
3.6 Sampling.....	32
3.7 Case Study.....	33
3.8 Analysis of Data .....	34
3.9 Summary and Conclusion .....	34
<b>CHAPTER 4:</b> .....	35
<b>FINDING AND DATA ANALYSIS</b> .....	35
4.0 Introduction .....	35
4.1 Quantitative Data.....	35
4.2 Section A – Respondent’s Demographic Survey .....	36
4.2.1 Gender.....	36
4.2.2 Marital Status.....	37
4.2.3 Age.....	38
4.2.4 Ethnicity.....	39
4.2.5 Education Level .....	40
4.2.6 Residence .....	41
4.2.7 Employment Status.....	42
4.2.8 Employment Sector .....	43
4.3 Section B- Finding the Causes of Air Pollution in Urban Area .....	44
4.3.1 Level of Concern on The Issues .....	44
4.3.2 The Quality of Air in Your Cities.....	45
4.3.3 What Contributes to Air Pollution in Urban Area? .....	46
4.3.4 Complaints Concerning the Indoor Air Quality .....	47
4.3.5 Symptoms While Working in the Area .....	48
4.4 Section C- Finding the Details about Air Pollution Index (API).....	49
4.4.1 Respondent’s Concern About Air Pollution Index (API).....	49
4.4.2 Air Pollution Index According to API Flowchart.....	50
4.4.3 The Cause of Air Pollution in Urban Area .....	51

# CHAPTER 1:

## INTRODUCTION

### 1.1 Research Background

As we all know, the pollution in this world have become one of big problem that all country in this world trying to prevent it. In developing countries, urban design is increasingly recognised as a significant determinant of air pollution. However the effects of urban structures on air quality in developing countries has not been adequately discussed in the literature to date, which points to a clear omission in latest research (Zhou et al., 2018). There are many types of pollution that we can see which is air pollution, water pollution, soil pollution and so on. It is well known by everyone that air pollution can affect our health. The air we inhale can contain an assortment of pollutions produced into the climate outside (additionally called ambient air) as well as indoor air. Air pollution may contain a mixture of solid particles, liquid droplets and gasses from a variety of sources including agriculture, motor vehicles, heating appliances, and tobacco smoke. Natural occurrences such as forest fires can also produce air pollution, which can contain wind-blown dust, pollen, which mould spores. Depending on the season, the weather can vary greatly in the composition of air pollution. The global issue of urban air pollution is growing negative influence on the atmosphere, climate and public health (Li et al., 2014). Air pollution is a form of substance-induced pollution which is the risk may involve gases, liquid suspension and solid types and may cause something serious to the human body and also endanger the world (Koo et al., 2020).

The Air Pollution Index (API) is easily built in ranges of values to report air quality, rather than using the real air pollutant concentration. This index also reflects its impact on human health ranging from good to dangerous and can be graded as described in the National Haze Action Plan according to the action criteria. The interest in developing air pollution measurement indexes in urban areas has been calculated by the number of publications on this issue. The key purpose of the air quality index is to measure the quality of the air in relation to its effect on human health (Murena, 2004).