PUBLIC POLICY ON AIR POLLUTION (US)

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Date

Introduction

Every resident living in the US is entitled to clean air. For the past 50 years since 1970, the US has delighted in sustenance and reduced air pollution. It has enjoyed a clean air environment free from dangerous gasses including Sulphur dioxide, Nitrogen oxide, Carbon dioxide, metals like lead, and recorded a pollution decline. A pollution-free air translates to health and productivity. The effects of air pollution put a large number of risks on children, the elderly, and other people suffering from respiratory diseases, causing difficulties in human health and natural environment damage. In association with the states, the US federal government ensures strict policies; this includes reducing pollutants like textile industries, power plants, and gasoline engines. It is no doubt that pollution is harmful; good living for residents of the US is achieved through numerous policies, improving the reduction of air pollution, as seen in the research.

Literature Review

Nature keeps changing as the introduction of various aspects to the environment modifies. Pollution has its main agents as chemical and physical modification, which s brought by technological advancement, rapid urbanization, industrialization, and mechanized transportation. The concentration of pollutants from industrial machines, petroleum vehicles, increases pollution, resulting in the residents' discomfort by affecting human health (Karolina, 2015). In cities and densely populated areas, the concentration of particulate matter, carbon dioxide, and sulfur oxide gases are very high, exposing the US residents to danger in health terms. The environment beauty and damage are seen (White, 2018). It is from this point of population concentration that the city is in dire need of planning the demographics to reduce the exposure of pollution to reduce the health danger (Devon et al., 2019). The city planning,

including residential and manufacturing industries, became a masterpiece. The separation of dwelling units and offices from pollutant agents exhibited a high decrease in exposure.

Methodology

The assessment of the research is majored on finding suitable demographics within the US, the distribution of pollution agents, as well as the population concentration in the hotspot areas. The characterization of sample areas is to ascertain the effects of pollution and the effects of a pollution-free environment on people living in the US. This approach can be used and modified soon to improve the results and findings of the research.

The use of modern techniques to evaluate the research process has been of help and accurate. The information and access of data from various databases have shown great results achievement. The use of surveillance and sampling from the monitoring stations under different governmental federations has packaged the data and given the quality assurance in fighting the pollution. The use of numerical and statistical analysis from different dispersed points and comparison of different demographics of various environmental exposure to pollution were used to get results of the test.

The collection of information, data, and results ranging from the air quality, emission of pollutants, weather patterns, and health in association with both pollution-free environment and polluted, was used to relay the dos and don'ts of the air pollution management. This method also informed the public and US governmental bodies and authorities on how to reduce pollution.

Focus group

The focus groups included in the study were populated from a wider population. They included the industrial environment, motor vehicle users, office people, and indoor public residents. The

participation formed based on the collective data approach on how pollution affects the health of people and their environment.

Demographics

The populated data was focused on the groups from all works of life from the whole region of the US and California states where more strict laws and measures are in place.

Results

Environmental pollution has been exhibited by the revolution of technology, high mechanization of transport, modern inorganic farming, and industrialization. From the methodology applied, it is evident that the data collection and the analysis show the extent of air pollution. The data shows the depth and loopholes that can be used to eradicate or minimize the effect of air pollution.

The Clean Air Act, planning, and indoor air management have given the policies that ensured clean air. From the analysis of mechanized transportation, it is evident that pollution can be reduced by using electric vehicles.

Proper disposal of chemicals by textile and manufacturing industries, treatment of waste, and taking care of the toxic gases before releasing among the policies in place have seen an improved emission and ozone depletion decline. Due to all the set plans, acts, and measurements, the US resident's health is well taken care of as the environment remains beautiful and less toxic.

Discussion

Clean Air Act (CAA)

The clean air act passed in 1970, was there to reduce pollution and enhance public health. CAA gave a set of guidelines in regulating the dangerous pollutant emission (White, 2018). The

act insisted on a reduced level of gasses, failure to which penalties and fines implicated to industries, and setting par in attaining permissible threshold, in turn keeping the air safe. Through this act, people have been protected by improving public health.

The City planning

One of the main pollution policy set was the excellent planning of the cities. This planning protects the inhabitants from exposure to pollution, increasing the clean environment, and saving the dollar (Devon et al., 2019). The federal game plans to build residential, learning institutions, health facilities away from pollution sources like industries. In this manner, the separation of facilities makes it more comfortable managing installations of air filters in the industries.

Indoor Air Quality

One of the most exposing places to the US resident is indoor, including office, vehicles, and study rooms. The American Lung Association insists on a clean environment in public, urging proper healthy ventilation to eliminate pollution sources and create a clear air. An adequate smoke-free climate is required since there are several high-risk personnel, including children who are still developing lungs, and dirty air will be harmful (Douglas et al., 2020). The need to control indoor air is essential, which keeps all people safe.

Reduce the use of ozone-depleting substances

The reduction of the use of depletants involves the change in the use of chemicals as pesticides to organic, the use of electric power instead of fossil fuels, and eradicate the greenhouse effect (Timothy et al., 2018). This reduction is how pollution can be saved from

depleting the ozone. Instead, they use other or complete avoidance of the substances is encouraged by the state.

The norm for motor vehicles emission

Two policy standards, Environmental Protection Agency (EPA) and California Air Resources Board (CARB) are used to check on the vehicle emission matters. Diesel engines emit particulate matter more than the petrol counterpart. Agency recommends the minimization of particulate matter by allowing a minimum emission for California's being 4 mg/km for vehicles life to 161,000 km, unlike the EPA, where reduction is realized to drop from 33 mg/km to 22 mg/km (Karolina, 2015). This minimization reduced pollution, while some states employed the electric vehicles having no carbon emission, in the case of Tesla motors. Also, increase the efficiency of vehicles to consume less, requiring a maximum of 25 miles per gallon than the 36, reducing emission in the lifetime.

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Conclusion

Finally, the US leads in a clean air environment through policies made. It is evident that in the past 50 years, the hard work and dedication of the federal government, state, and individuals towards setting and implementing the policies have worked best. The use of

alternative fuels has seen safe homes, industries, and motion made flawless. Clean air has resulted in good health, translating to healthy labor yielding a good GDP. City planning has improved pollution management, making areas safe. Imposing charges on more pollutant products through a market-based mechanism has been beneficial. It is evident in the state of California, where they employ strict rules, unlike other states.

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