**Elisabeth Kallstrom Clean Air for Africa Initiative (EKCAAI)**

**Preamble**

All over the world, exposure to particulate matter causes poor quality of life, that ultimately decreases life expectancy for every person. While useful statistics on air pollution are available in more developed climes like the U.S., Canada, Australia and most E.U. countries, such useful statistics are nonexistent in Africa.

**Quick Fact**

For many years, in those developed regions, the norm has been regulated use of ultralow sulfur diesel with maximum of 10 to 15 parts per million (ppm) of sulphur while over 2,000 ppm is allowed in vast majority of African countries.

**Our Identity**

A research-focused nonprofit, the **Elisabeth Kallstrom Clean Air for Africa Initiative (EKCAAI)** is dedicated to creating awareness and advocacy that will promote renewable energy, proper waste management and legislation around emission levels to improve clean air in Africa.

**Causes of Air Pollution in Africa**

* Growing industrialization with industrial emissions.
* Erratic power supply which leads to use of diesel-powered generators in homes, organizations and government offices; and use of small generators by even the poor - with devastating effects.
* Indiscriminate dumping of ozone-depleting refrigerants globally phased out in other parts of the world and other toxic dumps from abroad.
* Inconsiderate agricultural bush burning and open burning of garbage waste.
* Open cooking with wood-fired stoves.
* Deforestation
* Clustered accommodation in small confinements across many cities in Africa - avoiding toxic fumes is impossible.

**Effects of Air Pollution**

* Fumes consist of nitrogen oxide (NOx) and carbon monoxide (CO), additional particulate matter (PM) and hydrocarbons (HC) which cause acid rain and smog.
* inflammation of the airways leading to asthma, bronchitis and cardiovascular diseases.
* irreversible lung, liver and kidney damage
* cancer and avoidable rise in deaths

**Requirement**

A sweeping legislation is therefore urgently needed, both to mitigate the grave effects of a warming planet and save the lives of its people. Without an understanding of the impacts of air pollution on our health, we cannot be inclined to talk with the government to pass changing legislation that will regulate emissions from engines in our vehicles and generators.

**Our Journey so Far**

The EKCAAI has championed:

* Three different air quality research projects through two foremost Nigerian Universities: Nnamdi Azikiwe University, Awka and University of Nigeria, Nsukka. Our focus is on measurement of air quality from vehicle emissions, classrooms, outdoors and confined neighborhoods to see volume of toxic gases in emissions.
* Integration of air quality laboratories in other universities for the expansion of research.
* Introduction of Air Quality Society of Africa (AQSA) with team of doctors and professors in Kenya, Ghana and Nigeria. The AQSA will measure emissions in different parts of the region and publish data to interpret our current state and monitor progress.
* Climate sensitizations and tree planting exercises in many schools in southern and northern Nigeria.
* Full operations have commenced in Nigeria, then gradually spread around Africa.

**Partner with Us to Achieve**

* Collation of Air Quality Data in real-time across Africa.
* Emissions legislation that can monitor and set emission targets in Africa. With targets in place, restrictions can be set on vehicles to be purchased and equipment imported.
* Collaborations for tighter restrictions and security checks all over the world. Most toxic items may be currently shipped to Africa; however, the depleting ozone layer eventually heats up the entire planet for **us all**.
* Education on importance of properly sorting waste especially in households and communities. Leftover, plastic, metal, batteries and other harmful wastes are not to be jointly discarded. Burning such wastes release more toxic gases into the atmosphere. Plants and aquatic lives are not spared when burning is close to farms or rivers.
* Sensitization of both government officials and citizens on dangers of continuously inhaling these toxic compounds and particles in the human body.
* Replacement of dirty noisy generators with clean solar power.
* Installation of free solar panels in various communities to create mini grids of cleaner and more sustainable power as already in Kenya, Tanzania and South Africa.

**In Ten Years, We See**

Africa to have:

* Made significant progress on the reduction of harmful pollutants in homes and communities.
* Met Paris agreement by reducing emission by 2030.
* Maintained aggressive tree planting, afforestation, and climate change sensitization all over.
* Sustained advocation for renewable energy.
* Sustained advocation for greener Africa
* Continued consistent research and data collection.

**Get in Touch with Us**

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