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HOUSE RESOLUTION

REQUESTING THE DEPARTMENT OF EDUCATION TO PRIORITIZE FUNDING FOR AIR CONDITIONING IN SCHOOLS ON HAWAII ISLAND THAT ARE REGULARLY AFFECTED BY VOG.

WHEREAS, vog, or volcanic smog, is a form of air pollution that occurs when volcanic emissions react with moisture, oxygen, and sunlight; and

WHEREAS, volcanic eruptions occur on Hawaii island and can affect all parts of the State, but prevailing wind patterns typically push vog emissions westward, where they typically accumulate over North and South Kona and Kau; and

WHEREAS, depending on the level of volcanic activity, vog can affect air quality to the point where it poses significant health risks, including irritating the skin, eyes, nose, and throat and penetrating airways and the lungs, which can trigger respiratory distress and induce asthma symptoms; and

WHEREAS, studies about the effects of voq on residents of Hawaii island show correlations between vog exposure and increased rates of high blood pressure, acute bronchitis, acute airway problems, asthma exacerbations, and respiratory illness; and

WHEREAS, children are generally more sensitive to vog than adults because children have higher respiratory rates than adults, meaning they take more breaths per minute; and

WHEREAS, when vog levels are high, the public health recommendations to reduce exposure include staying indoors with the windows closed, using an air filter, and avoiding outdoor activities that cause heavy breathing; however, in schools without air conditioning, it can be very difficult to follow 31 these recommendations and retain a healthy learning environment at the same time; and

WHEREAS, hot temperatures negatively impact the ability of students to learn, and West Hawaii island, in particular the Kona area, consistently report some of the hottest temperatures in the State; and

WHEREAS, Hawaii's overheated classrooms can cause students to suffer headaches, nausea, heat rashes, heat exhaustion, and, in severe cases, heat stroke; and

WHEREAS, studies show that the achievement gap between cooled and non-cooled classroom environments can reach seventeen percent on standardized tests; and

WHEREAS, experiments in renewable energy cooling systems have lowered departmental projections for comprehensive air conditioning installation and classroom cooling; and

WHEREAS, using available energy efficient technology, including on-grid, off-grid, microgrid, and photovoltaic technology, should reduce the cost of air conditioning installation to approximately \$6,000 to \$8,000 per classroom; and

WHEREAS, the installation of air conditioning units in Hawaii island classrooms in areas where air quality data shows people regularly experience poor air quality and respiratory issues related to vog will create safer, more comfortable, and more effective learning environments that would better protect students from vog; now, therefore,

BE IT RESOLVED by the House of Representatives of the Thirty-first Legislature of the State of Hawaii, Regular Session of 2022, that the Department of Education is requested to prioritize funding for air conditioning in schools on Hawaii island that are regularly affected by vog; and

BE IT FURTHER RESOLVED that certified copies of this Resolution be transmitted to Chairperson of the Board of Education and Interim Superintendent of Education.