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To: Members of the Los Angeles City Council

From: Al Barrett, 2005 Marine St., Santa Monica Ca., 90405,

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Subject: The Urgency of Passing the "80% by 2050" Motion Proposed by Council Member Paul Koretz

As a father of two and a grand father of four, I urge you to adopt the "80% by 2050" motion proposed by Council member Paul Koretz.

I would like to know that my children, grandchildren and their descendants will be able to inhabit an Earth that is as supportive of human life as we, in our generation, have inhabited. The "80% by 2050" motion, if passed, will help to enable that.

The scientific evidence is conclusive that burning fossil fuels, i.e. coal, oil, and natural gas at current high rates to generate our energy is causing global heating and destructive climate change. Burning fossil fuels causes the greenhouse gas carbon dioxide to be released into the atmosphere. Heat energy radiated from the Sun-warmed Earth is trapped by carbon dioxide in the atmosphere and re-radiated back to Earth. During the past century, the concentration of carbon dioxide in Earth's atmosphere has increased 43%, with a corresponding 43% increase in the heat energy being radiated back to Earth by carbon dioxide in the atmosphere, and corresponding increases in Earth's temperature. The ten hottest years ever recorded have occurred during the last twelve years. Hundreds of billions of dollars of damage have occurred annually due to crop loss caused by heat-induced drought and super-storms caused by the higher heat energy content of the atmosphere. Tens of thousands of heat-induced deaths have been occurring annually.

Most ominously, the Arctic tundra, which contains vast quantities of frozen methane, is beginning to thaw. A molecule of methane released into the atmosphere traps and re-radiates eighty times as much heat energy as a molecule of carbon dioxide during the first twenty years of its existence in the atmosphere. If enough methane is released, we will have started a feedback loop in which accelerated heating causes acceleration in the rate at which methane is released with continued accelerated heating. Temperatures will continue rising for centuries. Ice sheets on Greenland and Antarctica will melt, causing sea levels to rise 200 feet. Most of the world's major cities, including Los Angeles will be inundated. Most of the world's land surfaces will become too hot for human habitation.

We do not need to allow this worst-case scenario to occur. We have the technical capability to prevent it from occurring by implementing a rapid transition to renewable energy technologies, such as solar, and implementing energy efficiency technologies

The International Panel on Climate Change, (IPCC), a scientific body sponsored by the UN, has estimated that we need to reduce greenhouse gas emissions worldwide by 80% by 2050 to have a high probability of preventing the catastrophic feedback loop from occurring. That is the basis for the proposal by Council Member Paul Koretz.

Cities consume 70% of the world's consumed energy. Cities and other local government entities can be role models in demonstrating the feasibility of achieving the "80% by 2050" goal by nations worldwide. Our peer cities, New York and San Francisco, have adopted the 80% reduction in greenhouse gases by 2050 in their planning, as has the Canadian Province of Ontario. Los Angeles should join in this campaign to help protect the health of planet Earth.

Los Angeles has many small innovative companies with expertise in renewable energy and energy efficiency technologies that are capable of enabling Los Angeles to meet the "80% by 2050" goal. For the sake of future generations and to establish Los Angeles as a leader in energy technologies of the future, please give them a mandate to meet this goal.

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