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<u>Testimony to the Telecommunications, Utilities & Energy Joint Committee (9/19/2017)</u>

Good afternoon. Thank you to the members of the committee for allowing me to speak today.

My name is Dr. Regina LaRocque. I am here today representing Partners HealthCare, the largest employer in the state. Several of our hospitals are teaching affiliates of Harvard Medical School, and our institutions are national leaders in biomedical research.

I have been an infectious disease physician and researcher at Massachusetts General Hospital and Harvard Medical School for more than 20 years, and I left my patient rounds to be here with you today. I have devoted my life's work to developing an improved vaccine for cholera and to preventing the global spread of infectious diseases. In 2015, the Lancet Commission on Health and Climate Change warned that the health effects of climate change — such as severe weather events, the spread of disease vectors, and food insecurity — threaten to reverse the hard-won public health gains of the last century¹. These are the gains that my colleagues and I have devoted our careers to advancing.

But the good news is that the steps we take now to combat climate change -- like rapidly increasing our state's renewable energy portfolio -- could also be the greatest health opportunity of our time. Increasing our state's renewable energy portfolio will directly improve the quality of our air and will yield an immediate health dividend for our communities.

The extraction of fossil fuels, their combustion in vehicles and power plants, and the leakage of natural gas from our aging infrastructure releases pollutants into our air. These pollutants include particulates, methane, toxic chemicals, and ozone. The medical science is clear that air pollutants are associated with premature death and increased hospitalization rates. They cause cardiovascular and respiratory disease -- diseases that we commonly care for in our patients, like heart attacks, cancer, bronchitis, and asthma. And increasing evidence associates air pollution with other medical conditions, like diabetes, adverse pregnancy outcomes, and even mental health concerns². It is often our most vulnerable patients – children, people with underlying health conditions, and the elderly – that suffer most.

The effects of air pollution are being felt right here in Massachusetts. The American Lung Association's 2017 "State of the Air" report looked at levels of ozone and particulate pollution across the United States³. The report found that more than 125 million Americans live in counties where they are exposed to unhealthful levels of air pollution, mostly related to fossil fuels. In Massachusetts, 5 counties (Barnstable, Bristol, Essex, Hampden, Norfolk) received grades of D or F for air quality.



Transitioning our state quickly away from fossil fuels and toward renewable energy sources will not only help combat climate change, but it will also have immediate benefits in improving the quality of our air and our health. This same message was echoed in a recent joint statement by 16 medical associations, representing more than half of the nation's doctors⁴.

The physicians and leadership of Partners HealthCare know that renewable energy is important for the health of our communities, and we have sought to lead by example. We now get 100% of our electrical power from renewable sources, including low-impact hydro, solar and wind. We have also reduced our consumption of all forms of energy by 26% since 2008, and we have set a goal to reach 40% by 2020. And we have done all of this without adversely affecting our operating costs or the quality of the health care we deliver. These gains that we have made have been supported by the state's innovative programs and policies, like the renewable energy portfolio standard, but we are at risk of falling short in our aspiration to be entirely carbon-free by 2025 without continued policy leadership. Because of this, Partners HealthCare fully supports increasing the RPS by at least 2% per year⁵.

On behalf of the physicians and leadership of Partners HealthCare, I encourage you to support our state's rapid transition to renewable energy. Our institution's deep commitment to a clean power supply depends upon it, and so does the health of the communities we serve.

For further information:

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¹ "Health and climate change: policy responses to protect public health", 2015 Lancet Commission on Health and Climate Change

² "Integrated Science Assessment of Ozone and Related Photochemical Oxidants: 2013", US Environmental Protection Agency

³ "State of the Air:2017", American Lung Association

⁴ "Medical Alert: Climate Change is Harming Our Health", The Medical Society Consortium on Climate & Health

⁵ "A Retrospective Analysis of the Benefits and Impacts of U.S. Renewable Portfolio Standards:2016", Lawrence Berkeley National Lab