

January 11, 2017

To Minnesota's Legislators:

We are Minnesota physicians, nurses, public health professionals and students of these disciplines dedicated to the best possible health of our patients and our communities. We are health care organizations and institutions located throughout Minnesota. As such we are writing to express our concerns about the impacts of fossil fuel emissions and pollution on the health of all Minnesotans. We know that carbon emissions and pollutants released from fossil fuels are increasing the risks and costs of heart and lung disease, heat related illnesses, allergies and asthma and other disorders. Fossil fuel related air pollution costs Minnesotans over \$800 million annually in higher health care costs. And we know that our most vulnerable communities suffer disproportionately from the effects of fossil fuel pollution.

In this, our third annual letter to you, we wish to draw attention to three issues: 1) the importance of building on recent progress in reducing carbon emissions and pollution; 2) the dangers of natural gas as a bridging fuel while phasing out coal; and 3) the need to protect our most vulnerable communities from the impacts of our changing environment.

1) **Building on Minnesota's Progress.** We are very encouraged by recent progress in Minnesota's responsible transition beyond coal to clean energy. State regulators recently approved Xcel Energy's Integrated Resource Plan (2015-2030) that ends coal burning at Sherco 1 and 2 over the next decade, and accelerates the expansion of renewable energy sources. Utilities throughout the state must move quickly in this direction. The legislature can help in a number of ways including, for example, expediting the implementation of the Clean Power Plan and building on Minnesota's successful Renewable Energy and Energy Efficiency Standards. A recent report, "**Climate Solutions and Economic Opportunities**" (note 1), from the Minnesota Environmental Quality Board contains a series of recommendations, including a 50% renewable energy standard and 2% Energy Efficiency Standard by 2030, that will help us get back on track with the science-based goals of the 2007 Next Generation Energy Act.

2) **Dangers of Natural Gas.** Utilities and regulators have been considering Natural Gas (94% methane) as a clean replacement for coal. However, scientific studies (note 2) have proven that unburned methane can be as dangerous to our climate as carbon dioxide. Large amounts of unburned methane leak into the atmosphere from fracking operations, gas pipelines, pumping stations, and storage facilities. Unburned methane is over 85 times more potent than carbon dioxide in warming the atmosphere and is the fastest growing US greenhouse gas. Policy makers and regulators must carefully weigh these concerns before authorizing further natural gas development in Minnesota.

3) **Protecting the most Vulnerable Minnesotans.** Vulnerable communities are those with limited resources to deal with our changing environment. Therefore, state and regional planners must make special provision for them. Vulnerable groups include the elderly and very young; those with limited mobility; the mentally ill; low income persons and communities with limited resources to replace and rebuild; and the homeless and those living in substandard housing. As an example during heat extremes those working outdoors (agriculture, construction, etc.) and those without reliable access to air conditioning are at highest risk of heat-related illness (note 3). The legislature should support efforts to prioritize climate resilience in vulnerable communities, including efforts to improve public buildings that can serve as cooling centers during heat waves.

As Minnesota health care providers and organizations, we look forward to working with our Legislators to continue making progress on these very important issues.

Respectfully,

Health Professionals for a Healthy Climate

- 1) Minnesota Environmental Quality Board. (2016) *Climate Solutions and Economic Opportunities*. At: https://www.eqb.state.mn.us/sites/default/files/documents/CSEO_EQB.pdf
- 2) Howarth, R.W., Santoro, R. & Ingraffea, A. (2011) Methane and the greenhouse-gas footprint of natural gas from shale formations. *Climatic Change* 106: 679. doi:10.1007/s10584-011-0061-5; Howarth, R.W. (2014) A bridge to nowhere: methane emissions and the greenhouse gas footprint of natural gas. *Energy Science & Engineering*. doi:10.1002/ese3.35.
- 3) Keim, M. (2015) Extreme Weather Events: The Role of Public Health in Disaster Risk Reduction. Chapter 2 In *Global Climate Change and Human Health*, editors Luber, G. and Lemery, J.

For further information, please contact hpforhc1@gmail.com

Health Professionals for a Healthy Climate

www.hpforhc.org

Over 290 health professionals and 14 health care organizations have endorsed our letter.

Organizations

Goodhue County Medical Society

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Health in Harmony

Bethany Kois, Research Director

Institute for a Sustainable Future

Jamie Harvie, Executive Director, Duluth

Minnesota Academy of Family Physicians

Maria Huntley, CAE, MAM, Executive Vice President

Minnesota Chapter of the American College of Physicians

John Bundrick, MD, FACP, Governor

Minnesota Organization of Registered Nurses

Katheren Koehn, MA, RN, FAAN, Executive Director

Minnesota Public Health Association

Lindsey Fabian, MPH, President

Minnesota Society of Neurological Sciences

Michael Rosenbloom, Saint Paul

Minnesota Student Association, Nursing, National Student Nurses' Association

Kayla Marie Roiland, President, Minneapolis

Ridgeview Medical Center

Robert Stevens, President and CEO

Therapy Place Services, LLC

Jan Weber, LICSW, Bloomington

Twin Cities Medical Society & Foundation

Sue A. Schettle, CEO, Minneapolis

University of Minnesota Nursing College Board

Victoria Peter, Nursing Student, Minneapolis

Zumbro Valley Medical Society

Beth Kangas, PhD, Executive Director

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