

T&E Committee #1
July 14, 2016

MEMORANDUM

July 12, 2016

TO: Transportation, Infrastructure, Energy and Environment Committee

FROM: Jeffrey L. Zyontz, Senior Legislative Analyst

SUBJECT: Discussion with Amory Lovins Concerning Net Zero Policies

Councilmember Berliner invited Mr. Lovins to address the Committee on the topic of net zero policies. Net zero policies are those that incentivize or require buildings to produce enough energy on site to meet the needs of the building's users.

Existing Code

Council actions have already touched energy conservation and on-site energy production issues. The Council approved the use of the 2015 International Energy Construction Code on July 21, 2015. That code requires energy conservation but does not require on-site energy production. On a scale between zero and 100, with zero representing a net zero energy building and 100 representing the average energy consumption for that building type in 2000, the Department of Permitting Services estimates that the minimum requirements under the 2015 International Energy Construction Code will produce buildings that will be indexed between 52 and 51.

The County requires new buildings over 10,000 square feet and all buildings substantially financed by the County to satisfy Leadership in Energy and Environmental Design (LEED) standards. Energy conservation is a requirement of those standards; energy production is an option. The Council has provided property tax "Green Building" credits for satisfying LEED standards. The Council required an expedited review of building permits required for residential solar power installations. On-site energy generation is a recognized public benefit for optional method development in CR zones. The Zoning Ordinance allows solar collection as a limited use in all zones. The Council approved a property tax credit for renewable energy devices; that credit was suspended for new applications in 2012.

Expected Changes to Code

The International Green Construction Code (IgCC) is designed to meet the need for a modern code governing the impact of buildings and structures on the environment, with clear and specific requirements that promote safe and sustainable construction. The International Green Construction Code (IgCC) will be submitted as a regulation by the Executive for the Council's consideration and approval in the near future. It was published in the County register with proposed amendments that would make some aspects of the code optional. The proposed regulation was the subject of an Executive public hearing this past January.

About Amory Lovins

Mr. Lovins presented a TED talk.¹ His bio from that TED talk reads as follows:

Amory Lovins was worried (and writing) about energy long before global warming was making the front -- or even back -- page of newspapers. Since studying at Harvard and Oxford in the 1960s, he's written dozens of books, and initiated ambitious projects ...to focus the world's attention on alternative approaches to energy and transportation.

His critical thinking has driven people around the globe -- from world leaders to the average Joe -- to **think differently about energy and its role in some of our biggest problems**: climate change, oil dependency, national security, economic health, and depletion of natural resources.

Lovins offers solutions as well. His new book and site, *Reinventing Fire*, offers actionable solutions for four energy-intensive sectors of the economy: transportation, buildings, industry and electricity. Lovins has always focused on solutions that conserve natural resources while also promoting economic growth; Texas Instruments and Walmart are just two of the mega-corporations he has advised on improving energy efficiency.

According to Wikipedia, Mr. Lovins was born in Washington, DC and spent much of his youth in Silver Spring, Maryland and in Amherst, Massachusetts. In 1982, he co-founded Rocky Mountain Institute (RMI) with Hunter Lovins. The Institute fosters efficient resource use and sustainable development. Since 1982, Rocky Mountain Institute has grown into a broad-based "think-and-do tank" with more than 85 staff and an annual budget of some \$13 million. RMI has spun off five for-profit companies.²

¹ Technology, Entertainment, and Design talks that are broadcast on radio and over the web. Mr. Lovins' TED talk can be found at https://www.ted.com/talks/amory_lovins_a_50_year_plan_for_energy?language=en.

² Wikipedia, Amory Lovins.