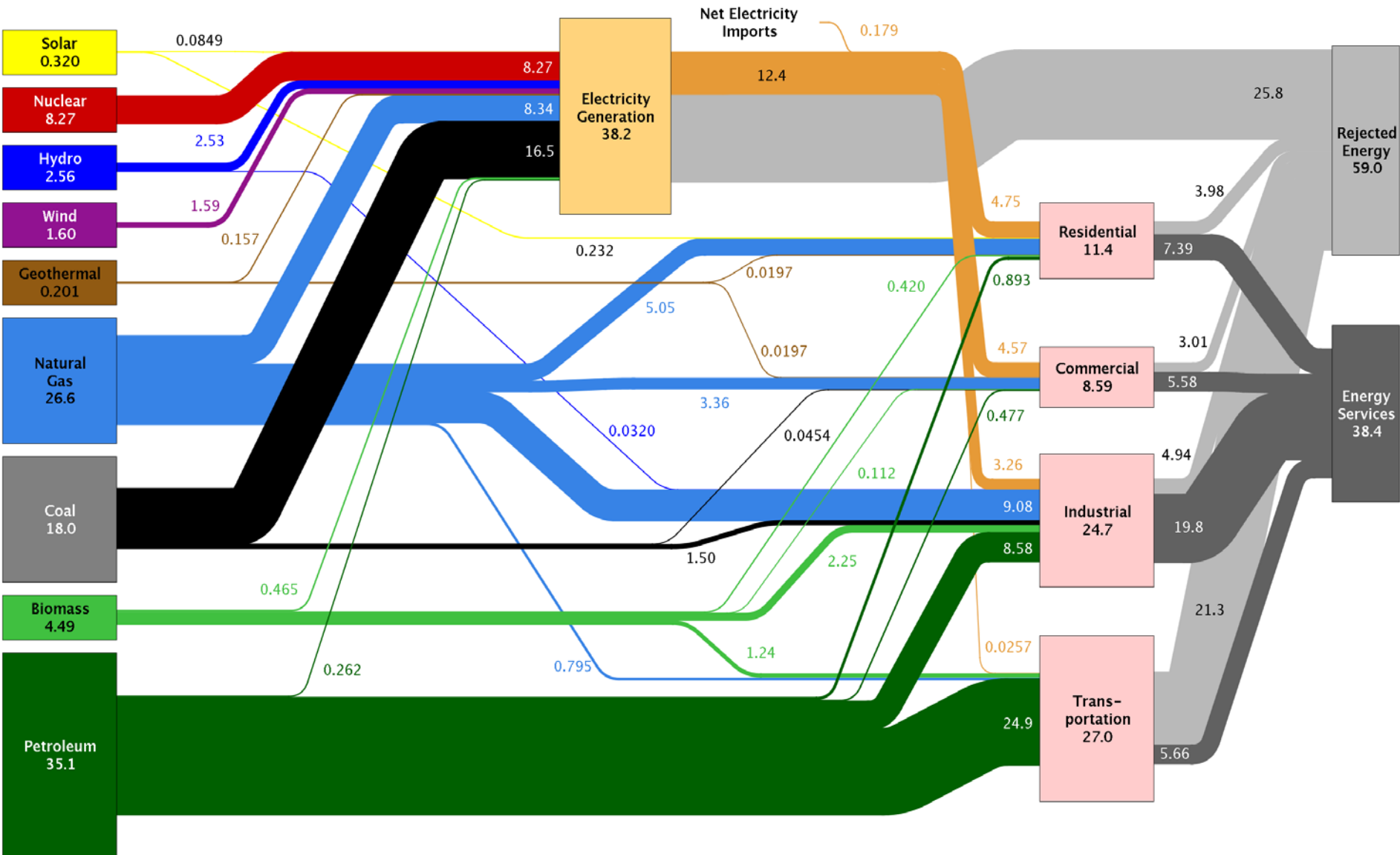


Energy Choices
Introduction
HEI Annual Conference
2015

Bob O'Keefe
Vice President HEI



Estimated U.S. Energy Use in 2013: ~97.4 Quads



Source: LLNL 2014. Data is based on DOE/EIA-0035(2014-03), March, 2014. If this information or a reproduction of it is used, credit must be given to the Lawrence Livermore National Laboratory and the Department of Energy, under whose auspices the work was performed. Distributed electricity represents only retail electricity sales and does not include self-generation. EIA reports consumption of renewable resources (i.e., hydro, wind, geothermal and solar) for electricity in BTU-equivalent values by assuming a typical fossil fuel plant "heat rate." The efficiency of electricity production is calculated as the total retail electricity delivered divided by the primary energy input into electricity generation. End use efficiency is estimated as 65% for the residential and commercial sectors 80% for the industrial sector, and 21% for the transportation sector. Totals may not equal sum of components due to independent rounding. LLNL-MI-410527

Session Goals and Key Questions

- The goal of today's session is to identify key elements that bear on the development of a sound national and international energy plan ...and discuss ways forward including opportunities and barriers
- Ideally energy approaches that that are widely available, efficient, clean, low carbon, encourage renewables and are cost effective with minimal environmental impact throughout a full lifecycle.
- The discussion is ideally grounded in today's reality (and for some time to come) of heavy dependence on fossil fuels
 - Significant current oil and growing shale gas use in the US
 - Expected increase in energy demand (coal use in India projected to double)
 - Dynamic renewables development and cost reduction (200-300% in Asia)



ENERGY Choices

1:00 PM Introduction Robert O'Keefe

1:10 ***The Big Picture: An Overview of Energy Use and Supply***

Sam Napolitano, United States Department of Energy

1:40 ***Hidden Costs of Energy***

Maureen Cropper, University of Maryland; Resources for the Future

2:20 ***Futures for Global Household Energy Use***

Kirk Smith, University of California–Berkeley

2:50 ***The Future of Vehicle Efficiency***

Drew Kodjak, International Council for Clean Transportation

3:20 ***Facing the Major Challenges***

Panel Discussion Led by Jared Cohon

4:00 PM Close



Thank You

