Cleantech in the Age of Exponential Growth: Disrupt or be Disrupted

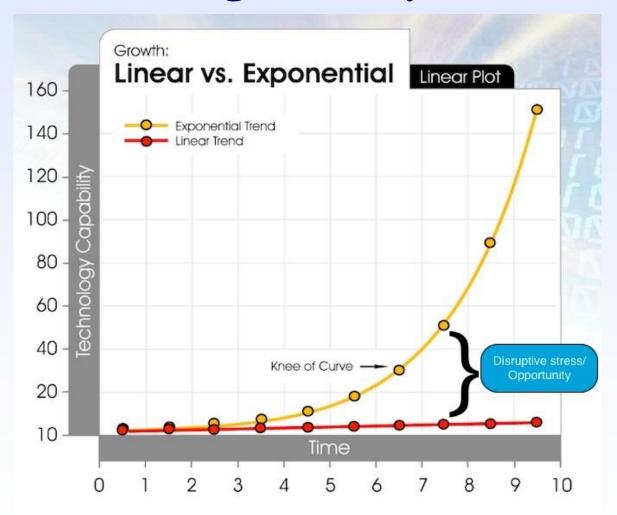
David A. Wolfe, Ph.D.

Co-Director, Innovation Policy Lab Munk School of Global Affairs University of Toronto

Presentation to the Economics and Environmental Policy Research Network Symposium Museum of Nature, Ottawa, March 2, 2018



The Age of Exponential Growth



"Rate of change & rate of growth are accelerating at the same time"





"I used to say that this is the most important graph in all the technology business. I'm now of the opinion that this is the most important graph ever graphed."— Steve Jurvetson



Broad Societal Implications

- Mooly Eden, head of Intel for Israel
 - Foresees the end of Moore's law
 - new materials or quantum computers
 - How many neurons in the brain 100 billion
 - 2 billion transistors on a microprocessor in 2016
 - Predicts microprocessors with 120 billion transistors by 2025-26
 - No doubt humans have embedded processors in their bodies - William Gibson predicted this in 1984 (Neuromancer)
 - "Our goal is to take the fiction out of science fiction and make it science"

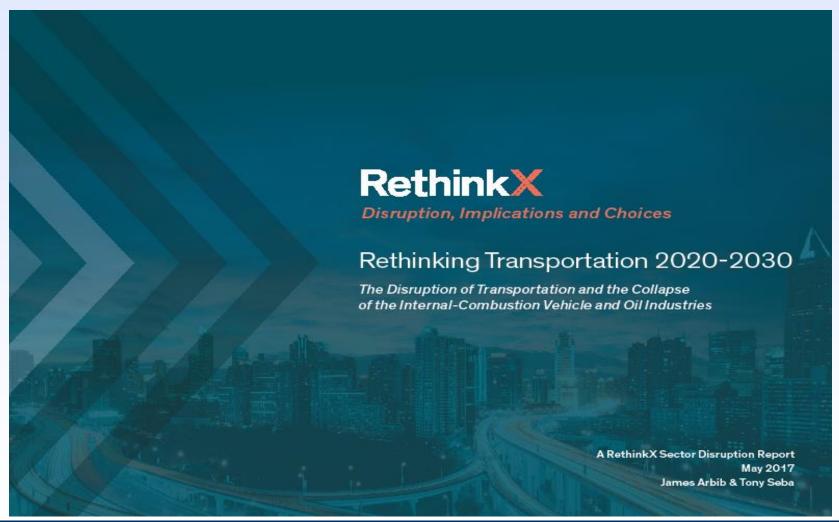




Auto industry is being transformed into a new technological paradigm based on an integrated set of emerging technologies



Rethinking Transportation





Sidewalk Toronto: Vision for a New Urban Community

