There’s a huge gap between the reality of today’s mines-to-landfills economic system and the utopian vision of living sustainably on an earth where all materials are recycled using renewable energy from the sun. Since the 1970s the economy has lurched from collisions with one biological or physical constraint after another. The earth is striking back . [It’s clear that] a big part of the problem is the public policies that aim to maximize GDP – an imperfect measure of economic well-being and an incomplete measure of societal welfare – with little regard for biophysical limits. But our national accounting system that purports to measure economic progress fails to include the data needed to explore the root causes of the crises that torment us. When we use the wrong metric we do the wrong things.

OPTION A Heun, Dale and Haney present a powerful and insightful overview of our economic system, and how GDP is connected to biological and physical systems at the extractive interface (agriculture and mining sectors). It begins with a rigorous analytical framework that tracks the flows of materials, energy and embodied energy to characterize the “footprints” we leave on the planet as our lifestyles “consume” the various components of GDP. The book’s major contributions are to show how these footprints are underestimated by the data in the national economic accounting system, especially during major energy infrastructure transitions like the one currently underway. For academics, policymakers and students alike, the book provides a fresh perspective and constructive proposals based on a solid analytical foundation.

OPTION B Heun, Dale and Haney present a rigorous analytical framework that connects our lifestyles (the goods and services comprising GDP) to the “footprints” we leave on the earth’s biological and physical systems at the extractive interface (the agricultural and mining industries). The book’s major contributions show how the incomplete data in our national economic accounting system systematically underestimates the impact of these footprints, especially during rapid energy infrastructure transitions like the one currently underway. For academics, policymakers and students alike, the book provides a fresh perspective and constructive proposals based on a solid analytical foundation.