

Preface: Techno-Economic Directions for a Green Future



BON VIEW PUBLISHING

Human civilization not only faces frightening forces but also sees encouraging developments.

The dark triad of climate change, pandemic, and war interact dangerously. Climate change, for example, leads to mass migration, which in turn accelerates the spread of pathogens. Nations may soon go to war to capture resources that were lost to their homelands due to Earth's changing environment.

The primary resources of which I speak are energy, water, and food – though others like materials and education cannot go unmentioned.

current technology. Corporations that are the biggest polluters are slow even to adopt existing green technologies.

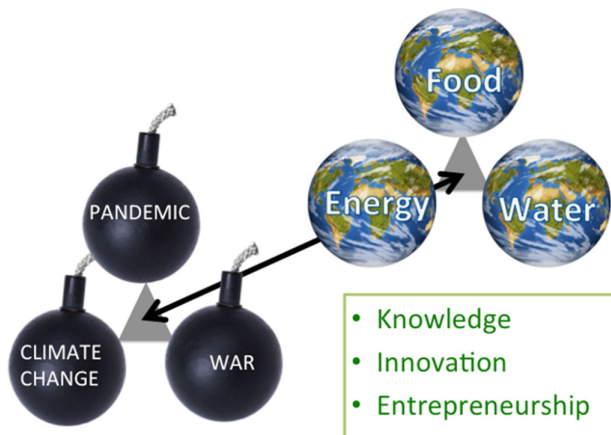
Now that I have painted a grim picture, I turn to a most hopeful one. By creating and disseminating knowledge, we can innovate and develop sustainable technologies. We can educate and encourage the entrepreneurs who will bring these green innovations to the populations who need it. In other words, knowledge, innovation, and entrepreneurship are among the very most important keys to a sustainable human civilization.

They are already showing impact. New advances in water desalination and battery technology, for example, will help back us away from the edge of climate disaster.

I emphasize technology to show that the answer is not purely economic. Yet the answer will require radical change in economic systems. Radically changing times mean we need an economics focused not on efficiency (equilibrium) but on flexibility and perpetual disequilibria. We need an economics that penalizes – rather than rewards – the creation of negative environmental and social externalities. An economics in which incumbent industries will not attempt to quash newer and greener technologies. And an economics that encourages enterprises to think long-term, rather than obsess about quarterly earnings.

This new journal, Green and Low-Carbon Economy, under its brilliant Editor-in-Chief and with the help of your thoughtful research articles, will move us in these needed directions.

Figure 1
Global threats, resource competition, and remedies



Researchers are certain that we cannot achieve sustainability – much less meet the UN's multi-faceted Sustainable Development Goals – with

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