

Evolution of the Green Economy: Prospectus for Creating A Consortium for Research among Management Scholars

Professors Alfred Marcus, Carlson School of Management, University of Minnesota,
Israel Drori, School of Business, College of Management, Shmuel Ellis, Faculty of Management, Tel-Aviv
University

The Proposal. We are inviting you to join (continue your participation with) a consortium of scholars throughout the world who are interested in studying various aspects of the evolution of the nascent green economy. The purpose of the proposed research would be to characterize developments in different regions of the world and compare them.

Topics that apply include entrepreneurship, strategy, knowledge management, innovation, networks, joint ventures, alliances, and public policy (see below for elaboration).

The Goal. The goal of the consortium is to establish a comprehensive global research program on this important topic. The group will work together to secure funding from such institutions as the EU, NSF, and various foundations. The entire group will come together to establish goals and work plans and to share findings.

Participants within the consortium will be encouraged to form subgroups to study separate issues. The researchers will create unique data sets for comparative purposes. The output will include scholarly papers, management cases, an edited book, and position papers for businesses and government.

The Event/s. We would like to convene a mini-conference (prior to or after) next years AOM in Montreal where we would present research in progress, discuss publication, and how to secure long-term grants to move the research forward. There may be a number of meetings before the mini-conference (is this possible?)

The Rationale. The rationale for this initiative is that the new green economy is likely to require a long-term transition, potentially as fundamental as any that has occurred in world history. The transition will require unique sets of coalitions among and between technological domains and different regional players. Greening will be played out by numerous technologies and numerous constellations of institutions in many regions of the world that have distinct advantages and disadvantages. How these technological domains, institutions, and regions evolve, co-evolve, and interact is very important to the pace and character of change, to corporate strategy, to company advantage, and to regional and global welfare.

The Main Research Question.

.The main research question, therefore, will be:

* What is the role of the players in technological domains in a variety of regional and local clusters where new green technologies are starting to emerge and bear fruit? What is the role of decision-making in these clusters of institutions in creating or not creating the conditions that new green businesses will need to thrive?

To the extent that there will be a global transition to greener economy, different clusters of institutions will assume different roles and specialize in different elements of this global economic evolution based on their unique sets of assets: physical (for instance availability of renewable resources like wind and sunshine), intellectual (areas of scientific and technical research excellence), human (concentration of entrepreneurial talent), social (the ties among the main players), and governmental (the set of incentives and regulations that will drive these clusters is critical to a green transition. If "greening" is to be a new motor of world economic growth it is incumbent upon management scholars to trace its evolution.

What we intend to do therefore is to trace: *The Evolution of Diverse Green Technological Domains*

More specifically we plan to explore the multiple organizational and strategic facets of the green economy's evolution through broad international research initiative. The following guideline present our major research concerns:

HOW DO NEWLY ORGANIZING INDUSTRIAL ECOSYSTEMS GAIN MOMENTUM

HOW DO THEY STRUCTURE THEMSELVES?

HOW DO THE DIFFERENT SEGMENTS/FIELDS WITHIN THESE ECOSYSTEMS EVOLVE IN EARLY STAGE/NASCENT MARKETS?

HOW DO THE PLAYERS RELY ON EACH OTHER TO MANAGE AND DEAL WITH THE AMBIGUITIES, THE RISK, AND THE UNCERTAINTY?

WHAT ARE THE CHARACTERISTICS OF THE DIFFERENT SUB-INDUSTRIES AND NICHE ASSOCIATED WITH THE GREEN ECONOMY?

WHAT IS THE KEY POLICY COMPONENTS IN VARIOUS COUNTRIES?

WHAT IS 'NEW' ABOUT CLEANTECH?

WHAT KIND OF 'LIABILITY OF NEWNESS' CHARACTERIZES THE INDUSTRY?

HOW DO GLOBAL DIVISION OF TASKS AND SPECIALIZATION IS INFLUENCING THE EVOLUTION OF THE INDUSTRY

HOW GEOGRAPHICAL AND ECOLOGICAL CHARACTERISTICS PROMOTE OR IMPEDED THE EVOLUTIONARY PATH OF THE INDUSTRY AND ITS SPECIALIZATION?

These are only sample of questions that we would like to address in our research project. We welcome your thoughts and ideas.

To fulfill this goal of trying to map these newly organizing industrial ecosystems, we will share data, analyze the data, and create case studies that roughly organize into the framework found in the table below. Each study should find a place in this broad framework. Collectively, through many diverse studies, we will build a comprehensive and comparative picture of these emerging technological domains.

Domains	Comparative Clusters	Players	Processes	Relationships	Results
<i>Energy</i>	Canada	Government/ subsidies/ regulations	Tech evolution	Substitution of old technologies (e.g. coal) by new (wind)	Sequencing – How linear? Shape of adoption curves?
<i>Water</i>	Israel	National labs	Knowledge creation	Transformation of existing industries (e.g. steel)	Pace/Speed of transitions Gradual/punctuated
<i>Biofuels</i>	EU	Strategic alliances/interorg relations trade associations	Capability acquisition	Struggle between new, emerging firms versus old, dominant firms	Logic of transitions
<i>Wind</i>	Switzerland	Entrepreneurs (ecopreneurs inside & outside firm) pioneers/idealists	Legitimacy/ Deligitimacy	Co-evolution of low tech/high tech	Blockers of change
<i>Solar</i>	China/India	Social Movements/ NGOS/ use of CSR/lobbying Counter-Movements	Cooperation/ competition	Co-evolution of big firms/small firms	Accelerators of change
<i>Batteries</i>	Developing Countries	Venture capitalists/ internal to firm & outside	Social construction/ Sense making Narratives	Co-evolution of new, emerging firms and old, dominant firms	Performance Indicators/ Measurement
<i>Algae</i>	Etc.	University/industry Partnerships/ tech transfer	Power/coercion	Co-evolution of generalist and specialist firms	New business models/ How widespread is the adoption/ Is there takeoff?
<i>Green buildings</i>		Startups (A Better Place)/Existing firms (BP)	Image making/branding	Creation of industry networks/industry ecologies	Consolidation: By means of Acquisitions Subsidiaries/ Separate Brands, etc.?
<i>Geothermal</i>		Consultants/ Analysts	Path dependence	Forging of new rules/creation of voluntary standards	Failures/ Learning?
<i>Transportation</i>		Component Suppliers	Spillovers	Overcoming transaction costs	Restructuring of entire industrial landscape/ realignment
<i>Etc.</i>		Shareholders/ individual & institutional	Identity creation/overcoming identity rigidities	Creation of strategic advantage; value creation & capture	Etc.
		Etc.	Etc.		