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with input from Erin Cummings

The Time is Now – Doubling Down on Climate Leadership

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Part 6: Institutionalizing Climate Change into Decision-Making

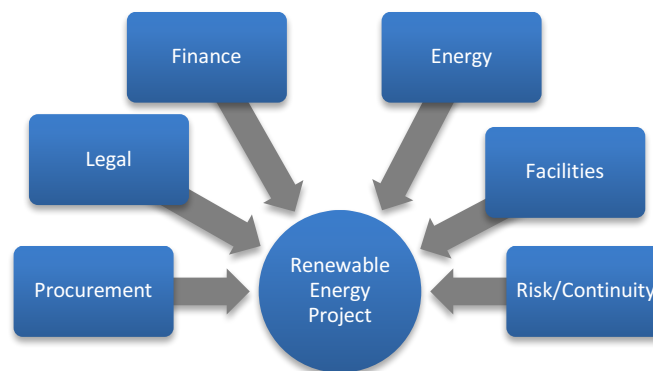
Climate change already impacts how the world around us functions, and it will increasingly continue to do so well into the future. We design programs and products, build cities and infrastructure, and run businesses and institutions under a set of assumptions that the planet’s climate systems will behave in a predictable, dependable way. When those models are wrong, our designs fail, resulting in economic harm and public health catastrophes.

To date, most large organizations have taken the approach of assigning an environmental, sustainability or resilience executive with the task of leading the institution’s efforts to address the effects of climate change on operations. However, this approach alone fails to adequately address:

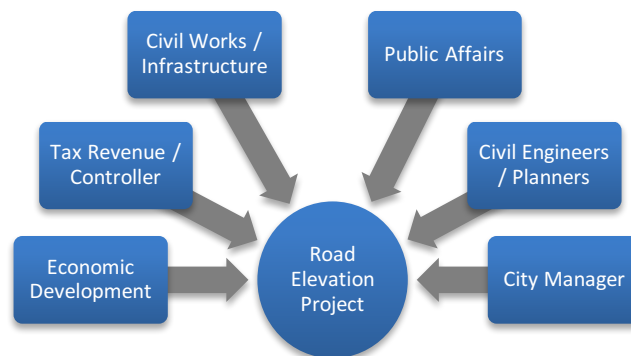
- The pervasive intersections of climate change across a broad spectrum of organizational considerations, including finance, strategic planning, risk management and business continuity, mission assurance, supply chain and procurement, design, energy and facilities management, along with a host of others;
- That in institutions with have thousands or tens of thousands of employees, the notion that a handful of people could effectively address these challenges is tantamount to a mouse moving a battleship;
- The complexities involved with these initiatives frequently require active participation, approval and oversight from individuals who lack formal training of understanding of the issues and technical aspects of these activities; and
- A complete review and potential overhaul of critical systems and infrastructure.

To illustrate the complexity and diversity of participants needed in addressing climate change impacts throughout an organization, take the following scenarios:

- **Renewable Energy Procurement:** ACME Widgets is pursuing a 20-year solar power purchase agreement in order to help meet its publicly declared greenhouse gas reduction goal. In order to execute the agreement, the organization’s director of sustainability more than likely must work with decision-makers in the procurement, legal, energy, facilities and finance groups. Constraints that are commonly experienced in this scenario include:
 - The procurement team has no experience with this type of power purchase agreement. Additionally, their policy guidelines lean toward a maximum of 10-year cycles.
 - The legal team must work with the procurement team to address the policy constraints, as well as any other relevant legal risks, authorities and considerations.
 - The energy and facilities team(s) is (are) not accustomed to working with these instruments and will need to incorporate this into their broader energy management plans.
 - The finance group is managing the organization’s cash flow and budget over a 3-year cycle.



- **Road Elevation Project:** The City of Beachside has traditionally been vulnerable to rain-induced flood and storm surges. Over the past 10 years, the number of “sunny day nuisance floods” has increased dramatically, and climate models suggest that they will continue to do so. Beachside is a city that enjoys significant tourism, has seen a surge in development (expected to continue for the foreseeable future) and resides in a state whose legislature and governor refuse to support constructive action on climate change. As a result, city management is contemplating a \$300 million dollar pilot project (funded in part by a raise in stormwater tax that will address project costs after 10 years) to raise roads in a 3% portion of its city limits by 3 feet and improve stormwater drainage. It is anticipated that this project will address flood risk other than from catastrophic storm system for the next 30 years, though sea level rise will require building further upon the project or other steps for the following decades. Prior to breaking ground on this project, the city should be absolutely certain that it has conducted:
 - An assessment as to the impacts of this project on real estate value in this neighborhood.
 - An evaluation as to the projected tax revenue scenarios with a particular focus on property and sales tax. That evaluation should compare and contrast of current property and sales tax revenues, to projections of those revenues if the project is not undertaken but sea level continues to rise, to projections of impacts on revenues based on various build and design scenarios being contemplated.
 - The city’s broader master planning should account for what this project will mean for the rest of the jurisdiction, which will mean ensuring that civil engineers and planners have mapped out the ripple effects of this project.
 - Public engagement on the project will be important to ensure that public support is continued and grows to support subsequent and needed projects.
 - Evaluate the business/tourist disruption impacts of the project and compare it to the current disruptions being experienced.
 - Engage with the insurance and real estate lender industry to ensure that businesses and homeowners are not negatively affected by the project.



These two examples reflect the significant volume and diversity of stakeholders involved in these highly likely scenarios. Simply put, if we don’t have the right people, with the right skills, in the rights parts of our organizations, we won’t be successful in transforming and modernizing to meet the challenges (and opportunities) presented by climate change.

Activating Entire Fields of Practice

The solution, however, does not need to be that complicated. We define profession as “a paid occupation, especially one that involves prolonged training and a formal qualification.” It is time we reconsider what it means to be a member of certain professions. Numerous professional societies are already updating their codes of ethics and competencies to address climate change and sustainability considerations (or are aspiring to do so). Some examples include:

- American Institute of Architects: "Scientific consensus shows that increasing atmospheric levels of carbon dioxide contribute significantly to rising sea levels, extreme weather events and degradation of natural resources. These trends threaten national security, human health, food supply, natural ecosystems and global economies. Climate change clearly is one of the biggest global crises of the 21st century."

- American Society of Civil Engineers: “Engineers shall hold paramount the safety, health and welfare of the public and shall **strive to comply** with the principles of *sustainable development* in the performance of their professional duties” and “Sustainable Development is the process of applying natural, human, and economic resources to enhance the safety, welfare, and quality of life for all of the society while *maintaining the availability of the remaining natural resources.*”

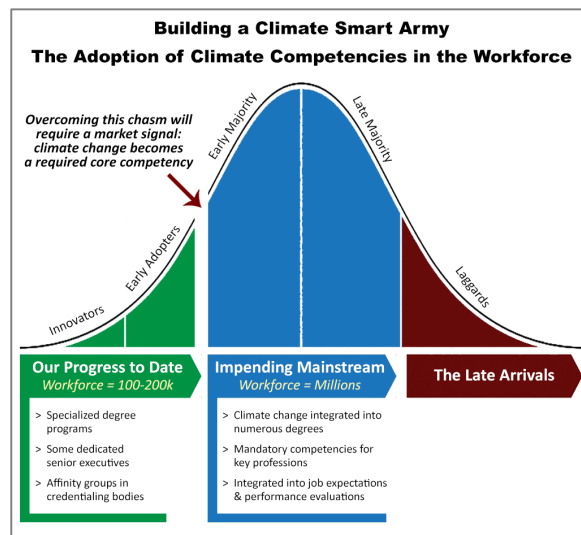
However, unless these bodies change the requirements to their credentials or are willing to enforce a stricter ethics code, they are simply acting as suppliers to a voluntary marketplace. Until there is enough demand from employers, the requirements of the trade cannot change. Accounting for climate change related risks and opportunities can't be an aspiration or a "nice to have" capability -- it is fundamental to the capacity of our businesses, institutions and communities to thrive.

Thesis: If the job description issued by enough employers, and corresponding performance evaluations/expectations, of a specific profession changes, the ripple effect is that the standard of practice for the entirety of that profession will change. We need a series of market signals that indicate that climate related competencies in key professions are critical and mandated.

Innovators and early adopters in the workforce, credentialing bodies and higher education programs have gotten us as far as we can go without a significant signal that will leap us across the chasm to majority adoption of the critical practices of emissions reduction, adaptation and resilience.

We have been down this road. Some recent examples of societal transformation that have resulted in new professions and competencies becoming mainstream include:

- The green building profession today (along with building rating systems) has been substantially advanced by legislative mandates, building codes and zoning requirements oriented toward energy efficiency in the built environment. With nearly 200,000 credentialed professionals, the U.S. Green Building Council is an embodiment of this transition, particularly as its members consist of architects, facilities managers, energy management professionals, developers, and numerous other professionals.



- The anti-money laundering profession was essentially mandated by an emphasis on chasing the Bin Laden money trail after 9/11. In 2001, a small group of experts came together to form the Association of Certified Anti-Money Laundering Specialists in order to build a workforce across numerous occupations capable of addressing an emergent issue. Today, the organization boasts more than 10,000 members across 160 countries. These members include compliance officers, regulators, intelligence and law enforcement agents, auditors, risk management professionals, accounts, investment advisors and real estate specialists.

Two Solutions

Executive Mandates: A group of recognizable and well-regarded institutions in the public and private sectors will move the needle. A mayor or chief executive mandating that key professions and decision-makers in his/her institution must acquire an appropriate set of climate-related competencies within a certain timeframe could activate the institution’s human resources and professional development capabilities. Establishing a reasonable deadline for existing employees to obtain appropriate training, as well as a requirement for these capabilities to be required for job applicants and prospective vendors would raise the bar appropriately while providing sufficient runway and resources to allow for this transformation.

- **City of Mountaintop Example:** Effective January 1, 2020, all City of Mountaintop employees with the following responsibilities must demonstrate climate-related competencies, or demonstrate satisfaction of accredited training, for their profession: planners, civil engineers, infrastructure, natural resources, emergency management, economic development, land use, codes and public policy. All new positions or openings starting on that date must include and require an appropriate set of climate-related competencies as determined by the City of Mountaintop’s Chief Resilience Officer.

- **XYZ Corporation Example:** All employees must take a climate change awareness primer made available through the company’s human resources portal. Additionally, all management above level x will be required to participate in management and/or leadership training provided by the company or through accredited institutions. The Chief Human Resources Officer will work with XYZ’s Chief Sustainability Officer and Senior Vice President of Risk and Continuity to identify critical climate change related competencies that should be accounted for by key professional roles.

Legislative Mandates/Incentives: State legislatures have the capacity to significantly transform and modernize marketplaces through mandates on state-level licensing, portfolio requirements and/or incentive programs. These measures can establish an important professional threshold for key occupations that, in particular, have a significant impact upon the public’s interests. For example, a state can exert its influence on requirements for architects, civil engineers and local government administrators.

These steps could activate hundreds of thousands, if not millions, of critical experts and decision-makers across disciplines:

Profession	Opportunity	Quantity	Year	Source	Scope
Architects	Designing for likely and projected scenarios (reduction of emissions, improved adaptive capacity and resilience)	110,168	2015	National Council of Architectural Registration Boards	United States
Civil Engineers	Designing for likely and projected scenarios (reduction of emissions, improved adaptive capacity and resilience)	281,400	2014	U.S. Department of Labor	United States
Energy Engineers	Driving footprint reduction and accounting for adaptation and resilience	121,170	2013	U.S. Department of Labor	United States
Supply Management Professionals	Decision-making that diversifies risk, informs product/program design, reduces footprint and ensures continuity	~55,000	2016	Institute for Supply Management & Council of Supply Chain Management Professionals	Global
Green Building Professionals	Accounting for likely and projected scenarios (reduction of emissions, improved adaptive capacity and resilience)	~195,000	2015	U.S. Green Building Council	U.S. & Canada
Risk Management Professionals	Informing risk models through incorporation of likely climate scenarios and related impacts	~20,000	2012	National Alliance for Insurance Education and Research, IRM & RIMS	Global
Emergency Management Directors	Advancing preparedness and informing planning/design	9,570	2016	U.S. Department of Labor	United States
Floodplain Managers	Ensuring that floodplain managers	~10,000	2016	Association of Floodplain Managers	United States
Financial Managers	Incorporating climate risk into financial management, as well as related tools such as power purchase agreements into strategies	555,900	2014	U.S. Department of Labor	United States
City/County Managers	Updates to key job descriptions, performance evaluation priorities and professional development activities	~20,000	2016	ICMA	United States
Human Resource Managers	Updates to key job descriptions, performance evaluation priorities and professional development activities	122,500	2016	U.S. Department of Labor	United States

About ACCO

The Association of Climate Change Officers is a 501(c)(3) non-profit membership organization for executives and officials worldwide in industry, government, academia and the non-profit community. ACCO’s mission is to define, develop and support the functions, resources and communities necessary for effective organizational leadership in addressing climate-related risks and opportunities. For more information about ACCO, please visit www.ACCOonline.org.

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