~ Climate Change ~
A Catalyst for Creating a Sustainable Society

Introduction: Many complex social and environmental challenges confront society, but global climate change is rapidly defining our future and us. We already create significant impacts, but unchecked consumption, population growth and harmful technologies combine to threaten our environmental and economic systems and our health.

Problem Statement: Climate change is all about us; regrettably, we don't know how to solve this complex problem. The scientific evidence is clear; however, technology alone will not solve the problem and how to foster widespread behavior change at multiple levels to reduce greenhouse gas emissions is not well understood.

Analysis: Two questions frame our challenge: *Where do we start?* And *why haven't we been able to solve the sustainability problem?* Reviewing history, questioning assumptions and applying innovative thinking can help. Historically difficult problem solving efforts (like the Apollo space program, Panama Canal, and Normandy Invasion) succeeded because most of the time was devoted to analysis before deciding upon a solution. Using what can be called the *System Improvement Process* can help. As a different way of thinking, this process has four steps:
1) Identify the problem,
2) Analyze the problem (system) until key cause and effect relationships are understood,
3) Use that knowledge and experimentation to converge on a solution, and
4) Implement the solution

Climate change is an environmental problem with serious health and economic consequences. Over the decades, the magnitude of the problem has attracted sharp minds from various disciplines, who have labored mightily to solve the problem. But if we look at the steps of the above process and projects like the Apollo program, we see this effort has lacked the most important ingredient of them all: the long rigorous analysis of step two. Due to reliance on standard problem solving approaches, an intuitive analysis rather than an analytical one has been performed. The result is step three relies on too many false assumptions. This leads to solutions that tend to fail, even though they intuitively look like they should work. *Thus the first reason current approaches are failing is poor analysis*.

The second reason is more subtle. What is it that makes climate change and the sustainability problem so incredibly difficult? Here's the logic: Society's movement toward sustainability requires three steps: The first is the profound realization we must change; if we don't, our environment, health and economic system will greatly suffer. The second is finding the proper practices that will allow living sustainably. The third step is adopting those practices.

Society has faltered on the third step. By now the world understands the need to live sustainably, which is the first step. There are countless practical, proven ways to do this, which is the **proper coupling** or technical side of the problem and the second step. But for strange and mysterious reasons society doesn't want to take the final step and adopt these practices, which is the **change resistance** or social side of the problem. *Therefore, change resistance is the crux of the problem.*

Designing a process that fits the problem can accommodate this insight. Steps 2, 3, and 4 from the Universal Problem Solving Process can be modified to solve both the change resistance part and then the proper coupling part of the problem. This leads to completely different results (from conventional wisdom) in the analysis step, which changes the overall problem from insolvable to solvable. After all, if you are unaware that overcoming change resistance is the key, then no matter how clever you are or how good your approach is, you cannot solve the proper coupling part. Unfortunately, achieving proper coupling is where current approaches focus nearly all their attention. *Therefore, the second reason current approaches are failing is faulty problem decomposition.*

Proposal: We've presented why complex social system problems won't yield to intuitively derived solutions; extensive analysis and correct problem decomposition is imperative. If we can establish an approach that incorporates this insight, then we will have a good chance at solving the problem. This proposal suggests we:

- Review the above argument and the evidence of its truth. We need to come to accept it as the foundation of a new productive way forward, or modify it and accept that.
- Support the involvement of qualified system dynamics experts to facilitate/guide an analysis of the climate change issue to identify multiple leverage points within our social system to affect change.
- Support a process driven analysis of the problem through a commitment of expertise, time and/or financial resources.
- Identify the appropriate portion of the system to pilot and test some solution strategies.

The bottom line is that we need to fully maximize the unique and synergistic characteristics of the three values-driven impact areas (financial, environmental and health) to help us "sell" the multiple, interdependent strategies necessary to solve this issue. Collaboration and rigorous analysis are the keys. Diversity of opinion, such as that which will be gained by a broad variety of collaborators, is important. But the right approach to analysis matters even more. We anticipate that the results will help participants to interact and understand the full spectrum of key leverage points.

Below is list of individuals representing various organizations, which have expressed an interest in working collaboratively to address climate change. Currently, these individuals are reviewing the proposal, confirming their interest and possible participation.

Potential Organizations and POCs		
National Council of Churches – Cassandra Carmichael	*George Mason Univ.* – Ed Maibach	*National Wildlife Federation* – Jim Wentz
Calvert – Bennett Freeman	*GE* – Peter O'Toole	*Wal-Mart* – Matt Kistler
TRCP – Tom Franklin	*Patagonia* – Bill Klyn	*EPA* – TBD
FWS – Stuart Leon	*Population Media Center* – Bill Ryerson	*CDC* – Jay Bernhardt, Howie Frumpkin
Yale University – Anthony Leiserowitz	*Goldman Sachs* – David Mittelbusher	*Bowman Design Group* – Tom Bowman
Thwink – Jack Harich	*Sustainability* – Jeff Erickson	*Marsh* – Jonathan Coon
Environmental Defense – Fred Krupp	*American Public Health Association* – Tracy Kolian	*Manning, Selvage & Lee* – Sheila McLean
Wildlife Forever – Doug Grann	*Assoc. of Fish and Wildlife Agencies* – Ron Regan	*Ideo – Valerie Casey*

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