

**SCIF** (Standardized Construction/destruction Impact Factor) constitutes a methodology as to the quantitatively managing the destructive impact of construction related activities. Whereas sustainable communities will come to fruition in the near future, the accelerated rate of construction, as a means of employment and wealth distribution, is out of control. Irreparable damage is being inflicted to the ecology via excessive combustion of fossil fuels, depletion of fresh water reserves and destruction of natural resources. Rapidly rising atmospheric CO<sub>2</sub> levels, the shrinkage of the polar ice caps and the disappearance of established glacier fields are a serious warning as to an imbalance of global equilibrium forces. Although the major nations of the world have moved to regulate CO<sub>2</sub> emissions and “cap-&-trade” carbon FUTURES, grass roots measures as to managing/capping elemental construction activities (the principal global destructive force) have neither been developed NOR addressed at this instance.

I hence constructed a ***global heat balance model*** in preparing the “Polar Equilibrium” synthesis as a means of understanding the shrinkage of the polar ice caps, and correlating the impact of atmospheric CO<sub>2</sub>. The heat balance model incorporated weighed the ***global*** combustion of fossil fuels against atmospheric temperature changes, depletion of rain forests and melting of polar ice. A period of two hundred years (200y) has been modeled, from 1900 to 2100. The principal findings were as follows:

- 1) That approximately 50% of the combustion of fossil fuels interact with the polar ice caps
- 2) That the depletion of the ice caps by 2100 will amount to 5% for the ensuing period
- 3) That the mean atmospheric temperature rise will amount to 7.3deg Fahrenheit by 2100
- 4) That the role of atmospheric CO<sub>2</sub> (barring ecological destruction) is practically ZERO, and
- 5) That the earth is at a great risk of a new ice age due to the long-term mantle trend.

The importance of foreseeing the risk of another ice-age is 1) limiting ecological destruction generally and 2) PRESERVING global hydrocarbon and rainforest reserves for future generations.

The proposed workshop will hence focus on tools to determine:

- 1) Whether construction-related activities rationally relate to the depletion of the polar ice caps
- 2) Whether construction activities and materials can be indexed as to the respective construction/destruction contribution
- 3) Whether an abatement protocol, OR alternative methodologies, may be rationally developed so as to mitigate the construction/ destruction impact
- 4) Whether construction activities per se may be offset in totality, and
- 5) Whether a *Standardized Construction/Destruction Impact Factor (SCIF)* may be rationally developed, and enforced in real time.

As means to an end the tutorial will entail:

- 1) A tutorial on the Binder Schmidt methodology that I developed with my Master's thesis in 1966
- 2) The rationale as to creating a global heat balance model
- 3) The SYNCOOL (rainforest) synthesis
- 4) A hands-on computational tutorial and
- 5) A round table discussion as to the **SCIF** synthesis, PhD material, private sector/governmental participation, continuation work, and funding options.