

Title: Green Finance and Total Valuation

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ABSTRACT

One of the greatest long-term contributions of the Green Movement is to replace short-sighted sustainability with Permanent Sustainability. The knowledge contribution from NPU Research Team is the Infinite Spreadsheet Valuation System, which corresponds direct to Permanent Sustainability.

NPU is the home of the Infinite Spreadsheet Research. The Green Movement supports the Infinite Spreadsheet more than the Infinite Spreadsheet supports the Green Movement. Permanent Sustainability implies that consideration of the environment has to be taken to infinity in time, which is the essence of the Infinite Spreadsheet. But, the Infinite Spreadsheet does not necessarily show that Green Movement should be the current choice, or world leading, innovation. Actually, the Infinite Spreadsheet could be one of best innovations in the Green Movement.

I would like to see that the Global Education Consortium joins force in supporting the Infinite Spreadsheet as one of its major contributions to the Green Movement. By its self-analysis, the Infinite Spreadsheet should have one of the highest rates of return of all the Green Projects. NPU Research Team is willing to offer the Infinite Spreadsheet to all member universities of GEC free of charge.

Even with governmental favorable tax and financing treatments, the two publicly traded Green companies, Fuel-Tech Inc. (FTEK) and Duoyuan Global Water Inc. (DGW) have rates of return of 15% and 25%, respectively, as calculated by the Infinite Spreadsheet Stock System. In comparison, Google (GOOG) has 32% rate of return. Most investors would rather buy Google stocks than buy Green stocks.

The Infinite Spreadsheet fully supports the policy of government subsidy of the Green Industry because of its high Non-Monetary Rate of Return. The Total Rate of Return in a stabilized economy should be approximately the same for all investments. The Total Rate of Return is approximately equal to the sum of the Monetary Rate of Return and the Non-monetary Rate of Return. For example, if the Total Rate of Return is 10%, and the investment risk, which is a Non-monetary Rate of Return, is -5%, the Monetary Rate of Return is $15\% = 10\% - (-5\%)$. Most of the DJ30 stocks have Monetary Rates of Return around 10%.

The public, in the form of the government, should compensate the inherently low Monetary Rate of Return of Green Companies with monetary subsidies in the form of low interests, long amortization terms, low points, government low cost insurances, etc. However, the low monetary rates of return of Green Companies are due mostly to its low degree of automation. One of the most automated Green technologies is the Infinite Spreadsheet, which is needed to appraise all the Green Projects.

The current standard of Green Valuation is Contingent Valuation Method. The problem of value is defined mathematically by Gerard Debreu in his book *Theory of Value*. The problem is solved by the Infinite Spreadsheet, which quantifies the Supply and Demand Model. The Contingent Valuation Method is developed prior to and without the knowledge of the Infinite Spreadsheet. It should be replaced by the Residual Method for appraising land price. The Residual Method is fully incorporated in the Infinite Spreadsheet Valuation System, available on the web: <http://www.infinitespreadsheet.com>.