

***Chasing Blue Sky:
Environmentally Restorative Practice
in a Market Economy***

Lynn K Sugden MBA FCMA

It is the position of this paper that:

- In the interests of sustainable operations and profit companies have a responsibility to attend to the long run interests of society including the maintenance and restoration of the earth and its environment.
- As a minimum we must maintain the current quality of life including economic well being, environmental health and social equity.
- The wasteful greed associated with maximizing the quarterly return to the shareholder is an enemy to the quality of life that we desire.

The Problem

We now realize that the earth's resources are finite and that our economic and social systems continue to treat them as infinite free goods to be used and disposed of at any time by anyone without immediate cost to the user. The evidence tells us that the capacity of the earth to heal itself is diminishing and that the effluent of our lifestyle remains as residual. We are faced with the reality of our planet meeting its **Macro Capacity: The earth's ability to heal**. We understand that slowing down the rate at which we use the earth's resources and manufacture effluent is not sufficient. We must eliminate the use of the earth's resources and stop the manufacture of effluent as a precursor to restoring the planet on which we live. Our ability to sustain life is at stake.

The Current Situation and a Framework for Improvement

Popular thought must change before we can hope to solve the problem. It is normal to look for the balance between a return to living off the land and the convenience that modern

technology and science has provided. As it stands we are trapped on a continuum which defines the range of opinions found in Society in regard to what has to be done next. Where one stands on the continuum defines, or states, how much of a tradeoff one is willing to make. At the extreme one might argue for full economic development of the earth's resources without regard for the long run effect on environmental quality. People at this end tend to argue that air, water and the earth's other resources are free goods and that the laws of supply and demand will attach the appropriate economic value to these resources. As they become scarce, the cost of acquisition will increase and demand will subside. The argument continues that as specific resources become scarce, industry will find alternative methods to facilitate production. In doing so, the average citizen will benefit from the continued economic growth.

On the other end of the continuum, lives the belief that all economic activity must be stopped in the name of preserving the earth and its resources as it now stands. The most radical factions within this group has been known to spike trees, chain themselves to various objects, and float rubber dingees in front of ocean freighters to prevent commerce and gain exposure for their cause.

The average citizen sees industry as the source of most of the problem and is uncomfortable in the belief that the current state will end in goodness while viewing the opposite end of the continuum as a threat to the lifestyle afforded by centuries of innovation and science that has made our lives more enriching.

Both ends of this continuum represent extreme beliefs and behavior that help us define the middle. The average person stands in the middle. Not ready to give up the luxury car with air conditioning in favor of transit or a bicycle on one hand. Yet on the other, worried about what will be left for the children and grandchildren. Worried that maybe they have lived the last generation of ultra convenience. We stand in front of the dish soap at the local grocery store and lament whether to spend a couple more bucks on 28 day biodegradable soap. The average person debates with their neighbor whether the municipality's latest recycling and

composting program hasn't gone too far just after they have agreed that someone should do something about the algae in the lake.

Governments are no different. They will slide up and down the middle of the continuum to find the place where the most votes live. They publish success in terms of dollars and cents. Balanced budgets, balance of payments, gross national product are what consume the legislatures. Environmental issues get discussed in balance with the economy.

If we stay at the level of this continuum, nothing will change. Moderate opinion from either end will provide compelling arguments in favor of one position and offer scare tactics in regard to the ultimate state if the opposite opinion prevails. In the meantime, both ends will continue doing whatever it is that they do, as they have always done. The media will continue to report the events from one perspective or the other and the governments will continue to take advice from the scientists, business leaders and voters while ensuring that they position themselves where the most votes live. The average citizen will continue to separate organics, cardboard, plastics and garbage, drive to the store and fly to the meeting down east. Maintaining the current state will always involve compromise. No one will be entirely happy. And the environment and the opportunity to sustain our quality of life will continue to decline. Living on the continuum will require a perpetual trade-off: The Economy versus The Environment!

The answer to this dichotomy is to look for higher ground. Find a solution that does not contain a trade-off. Richard Schonberger suggests that "when business strategy makers and goal setters use the [term trade-off], they are copping out. It becomes the justification for low expectations and [low] performance." (1990) The answer is to find the "win-win" result where economic activity contains its historical growth patterns while our footprint is reduced to zero or even better, we become environmentally restorative. The end state is to understand that environmental sustainability and sustainable profit are synonymous.

Learning from History

“people who seem to have had a new idea have often simply stopped having an old idea.”

[Edwin Land as quoted in A Road Map for Natural Capitalism [Lovins, Lovins, Hawken, 1999].

As a first step toward the solution we must rationalize how the perceived enemies of the environment and the economy can become friends or partners with a common end point. Just over 50 years ago business began to discover the possibility that the perceived enemies to profit of quality and cycle time are in fact friends, if a long run, sustainable perspective is taken. Not with standing the fact companies that make decisions based upon short run analysis of operations (where quality and cost are enemies) still exist, history supports the fact that quality, cost and responsiveness [Atkinson and Russell, 1990] are complementary and that sustainable operations and profit are dependent upon understanding the relationship [As confirmed by Porter and van der Linde, 1995].

In regard to the environment and the economy, some business leaders began to realize in the mid 1990's that the most profitable way to conduct business was with the least amount of waste. Anything that does not directly contribute to the value of the product or service is considered waste and an enemy to profit. Effluent, as one example, is such a waste. Ray Anderson, CEO, Interface Inc, a large manufacturer of carpet tiles, realized the connection between being environmentally restorative and profitable. Interface is working toward their vision of an increased quality of life for all stakeholders.

The Response of the Individual

The primary focus of this paper is the future actions of companies working in the best interests of their stakeholders. Due to the size and nature of these companies environmental restoration and the improved quality of life it brings rests on the shoulders of these organizations. In contrast the combined actions of individual residents will not have a major impact on the problem in the **short run**. It is important, however, for individual residents to adopt environmentally restorative practice for the following reasons:

- Immediate quality of life improvements accruing to the individual and the family. This includes increased disposable income through savings.
- Leadership: being visible within the community and identified as someone who is a giver rather than taker.
- Attitude creep: Actions at the office will be influenced by the attitude individuals own at home and take to work.

Putting these thoughts together: If an individual wishes to influence global belief and practice, that individual must be committed to action locally, be aware of global issues and be prepared to take a leadership role when called upon. In addition we must realize that there is no big bang style solution to the problem. The problem is a series of layers to form the onion. The solution is to stop the continued growth and begin peeling back the layers, one by one. Although it is true that the combined actions of individual residents will not have a major impact on the problem in the short run, those actions will have an impact in the long run. For reasons listed above.

Immediate Action

Current plans are not calling for a reduction in the amount of environmental harm that is happening. At best there has been a call for slowing down the rate of increase. At worst, the plan is to “reduce” the amount of harm initiated per unit of production which is nothing more than the worst form of green wash and results in an increase of effluent as production grows.

Ryan Orchard applied the **risk assessment model** of decision making to decisions currently facing us. Currently the individual must accept the following short run dichotomy presented by environmental preservation (not restoration) versus the economic accumulation of goods and services and the consumption of products.

As individuals, we have one of two choices:

- 1) Adopt the belief that global warming is a hoax or that it will work itself out through supply and demand and that science will solve the problem before the consequences are permanent and act according to this belief, or
- 2) Act based upon a belief that the earth will soon reach its macro capacity resulting in the earth's systems' failure.

Let's take the decision out thirty years and look at the **risk of error** associated with each of the two decisions. That is, analyze the worst case scenario for each decision:

- 1) If we choose the status quo and we are **100% wrong**, the eco system will collapse. Everything that we hoped and worked for will be done! The damage will be so great, that life, for future generations will not enjoy the luxuries or benefits that our generation has enjoyed. What we consider as free today (air and water) will become very expensive and will be the domain of the extreme rich. Swimming in the lake or camping in the mountains will be historic memories. Our landfills will be full. Garbage will shape our landscape. The price of gasoline, heating fuel and air conditioning

systems will be prohibitive, and people will be forced to use alternative methods of transportation. If we chose alternative one today, and we are wrong, the life we seek will never result.

- 2) If we choose the second alternative and we are **100% wrong**, we will all have access to fuel, clean air and clean water. Our body health is higher due to proper diet and sufficient exercise. In turn public health care costs are down. Landfills are not full. Soils are not leached from chemicals and pesticides. Likely, due to the change in lifestyle, we will be closer to your families and, as is the theme/message of this work, more disposable income because less waste is the most profitable way to do things.

It is clear that adopting the attitude that everything will be OK by continuing along the current path is the wrong choice. The risk of error is too big! As an individual, choosing a more environmentally friendly lifestyle, even if we are 100% wrong in our decision, will result in a high quality of life. And as discussed elsewhere in this paper, a high quality of life is what we all want.

An individual must work within the sphere of influence whilst continually educating one's self and thereby increasing the sphere of awareness. Any incremental step away from wasting the earth's resources or moving toward enriching those resources is positive and should be celebrated. The call to arms for some time has been to *reduce, reuse and recycle*:

Recycle: The first and most basic step to deal with the outer layer of the onion. Recycling is a process of deferring the product's end of life. Although tougher to find than residential recycling programs, industrial recycling does exist. When discussing the concept of circular versus linear systems Hawken [1993] refers to a chain of Scandinavian companies that use the effluent and post consumer waste of one company as input for the next extending the life of the used resources indefinitely. Ray C. Anderson, CEO, Interface, Inc [1998] outlines his company's plans to climb mount sustainability and in doing so developed

the “evergreen lease.” Recycling is an effective way to help the environment and the bottom line without compromising end product usefulness.

Reuse: An intermediary step that extends the end of life for a product already manufactured and includes using yesterday's plastic bag for today's lunch or designing packaging material that by repositioning can be used to ship the raw materials by partner 'A', the subassemblies by partner 'B' and the final product to the customer by partner 'C' within the supply chain. Reuse involves the design and construction of the product with multiple uses in mind (an extension of Taguchi's Robust Design principle) rather than a single use followed by disposal.

Reduce: The step from reuse to reduce is important in relation to improving our relationship with the environment. The negative connotation of 'reduce' is 'do without.' At the family level, this may not be a bad thing if it improves the long run physical and emotional health of the family. For example: riding a bicycle to the corner store instead of driving the van. At the shop it may mean turning the heat down by a couple degrees and wearing a base layer of clothing. Reduce does not have to mean 'do without.' In industry the reduce objective implies efficiency and effectiveness. The evolution of the concept of lean manufacturing brings us to the environmental practice of 'reduce.' The combined drivers of reduced time and product inventory and zero environmental impact result in the 'win - win' situation of higher quality of life and increased profit. With zero waste as the goal leading companies employ the concept of continuous improvement which is the production equivalent of 'peeling the environmental onion.' These processes are incremental in nature not revolutionary and based upon simple math. If performance is improved 1/1000th per day (imperceptible by most performance measurement systems)

the subject process will double in performance within two years. Applying this to environmental restoration, if we move off of our bad habits by a measure of 1,000th per day, we will be practicing good environmental habits before we know it.

More recently, the concept of environmental **footprint** has been used to describe the impact of our actions on the earth's wellbeing. There are four levels of managing the footprint:

- 1) Reduce – An obvious first step is to inventory the current environmental performance and identify areas for improvement. Attacking the boulders of poor performance first, then the rocks, pebbles and sand.
- 2) Neutral – Offsetting poor performance with an equal level of reduction or restoration in another area. For example: purchasing carbon credits to fund the planting of trees. The positive of this level of footprint management is that there has been no net contribution to the problem. The down side is that there has been a wasteful use of resources.
- 3) Zero – No absolute waste of the earth's resources. All inputs are outputs or byproducts from some other source. Outputs and effluent are 100% absorbed naturally by the earth within a few days of release.
- 4) Restore – The net result of the process/action is that the environment is left better than when the process/action began. Two valuable and inexpensive ways for an individual to participate in restoration are leadership (transactional and transformational) and education.

The goal is not to be neutral by offset. This is because we are damaging the environment on one end and cleaning up on the other. The environment is better off and our balance sheet is improved if we do not damage the environment (and thus save the expense of clean up). Furthermore, the cleanup is often in a different area than the original damage. The preference

is to leave zero foot print having never impacted the environment at all. The ultimate goal is to be **restorative**. Companies and individuals can be restorative through these initiatives: Reclaim, restore and repair historical damage, education and leadership (transactional/role model and transformational/facilitator).

Philosophy and Alignment

Discussions (and arguments) on the subject of socio-economic policy are generally restricted to a (one dimension) continuum. Where one stands on the continuum is generally based upon agreeing to the majority of attributes at that point and compromising one's values on some of the others. The "right" wing brings with it the belief in a market economy, individual freedom and small government. The "left" wing is defined by a planned economy and social structure and big government. Environmental protection has been branded a left wing ideal that restricts the right wing economy from functioning properly. The right wing threatens that environmental protection brings with it big government and less freedom.

The socio-economic landscape cannot be defined using this one single dimension. There are three dimensions needed to define the landscape:

- Planned Economy vs. Market Economy
- Generosity (givers) vs. Greed (takers)
- Green vs. Waste

In recognizing three dimensions it is possible to exist in the space defined as market economy, green and generous. In this space you will find business leaders that see their companies responsible for the externalities that they generate. These companies internalize the concepts of **Corporate Social Responsibility** voluntarily and see themselves as increasing

the quality of life within the community. Ray Anderson, is an example of such a business leader and his company, Interface Inc, is an example of such a company.

Even more enlightening is the possible existence of someone in the space defined by market economy, green and greedy. The quadrant free market and greedy is purported by those inhabiting the space as “capitalism.” The author disagrees with this description; however, he cannot change public perception. As a result any reference to the free market in this paper should be differentiated from the common term capitalism that brings with it the concept of greedy self interest. How can someone working in a market economy driven by greedy self interest support environmental protection? The only answer is that environmental protection provides them with more profit that in turn buys more goods and services

Bob Willard has identified five steps toward a sustainable company.

- 1) Pre-Compliance
- 2) Compliance
- 3) Beyond Compliance
- 4) Integrated Strategy
- 5) Purpose / Passion.

Dr. Willard notes that steps one through four are taken in succession and that there is a line separating the fourth and fifth. The fifth step is not a logical conclusion of being on the fourth step. Furthermore there are companies at the fifth step that have not taken the first four. These companies are driven by the rightness of their actions and inhabit the space referred above as market economy - green – generous. The companies on the fifth step do not follow environmental good practice in the name of more profit. These companies manage to a profitable state while attaining their stated vision.

Willard's final observation in regard to the stages of the journey to sustainability is that companies that are at stage 4 exhibit the same behaviors as the companies that are at stage 5 and enjoy the same outcomes. Both groups have increased profit and contribute to environmental restoration. What differs between these companies is the motivation. Stage 4 companies are driven by sustainable profit only. Sustainable environment comes with it. Stage 5 companies are driven by increased quality of life for their stakeholders of which includes a solid financial structure along with positive social structures and positive environmental practice.

The Purpose of Commerce

This paper refers to the free market in an effort to distance itself from the common misconception that capitalism and commerce must have a winner and loser. The later is based on the assumption that the world economy is a zero sum game. By the time Smith (1776), Ricardo (1817) and Karl Marx (1848) developed their theories it was understood and accepted that through the production and exchange of goods and services society as a whole will benefit as a result of increased **wealth**. It is clear that the concept of wealth meant far more than profit and the accumulation of money. **Wealth** is related to the economic concept of utility and the modern concept of **quality of life**. Profit did not exist in its current form until the early part of the 20th century [Johnston and Kaplan, 1987] and money always existed as a store of value and medium of exchange, nothing more. Neither profit nor money directly dictates the quality of life nor can either fully (directly or indirectly) provide for same. The purpose of commerce reaches far beyond the maximization of short run profit.

Ernest C Huges said "To maximize return on investment is an inadequate statement of purpose. It fails to accomplish the paramount responsibility of leadership - to provide meaning and inspiration to those who are expected to follow. The mass of people within our

corporations are not primarily motivated by maximizing private gain. Many firms are structured as if they were . . .

Financial objectives also are an inadequate statement of purpose because they fail to recognize the social justification for the corporation's existence. Business enterprises do have a noble purpose, and they should recognize and proclaim it. The purpose of business is the creation of wealth - not for a few, but for all. The creation of genuine wealth in the form of goods and services [and jobs] must be the corporations' primary purpose. Financial results will follow as the corporation succeeds in this primary aim."

[Ernest C Huges (with Alan D. Anderson), *The Spirit of Manufacturing Excellence: An Executive's Guide to the New Mind Set* (Homewood, IL: Dow Jones-Irwin, 1988), p. 108.]
As quoted in *Relevance Regained* [Johnson, 1992].

Huges's comments suggest that a company is responsible to stakeholders external to the daily economic transactions. Corporations must act in the best interests of sustainable social, environmental and financial structures and manage their internal affairs accordingly. The word sustainable takes the subject at hand above the economic – environmental trade off argument.

The three legs of Willard's "stool of sustainability are economic, environmental, and social responsibilities that contribute to public good and quality of life." (pg 17) Willard continues: "Expressed as groupings of capital assets, the economic leg is about sustaining financial, structural, and manufactured capitals; the environmental leg is about protecting and restoring natural capital and living off its interest instead of its principal; and the social leg is about nurturing human, intellectual, and knowledge capitals within the company and fostering social/relationship capital with the local community and the rest of global society."

Given the pervasiveness of commerce through a market economy within our society it is clear that companies have a responsibility to attend to the long run interests of society including the maintenance and restoration of the earth and its environment.

The Enemies of Environmental Restoration

The benefits of environmental restoration are so compelling it is difficult to understand why we are not doing more. The forces against this case must in sum be as great as the forces in support. The enemies of environmental restoration that represent negative vectors are greed, government, ignorance, disbelief, adapters, linear thinking and systems and misalignment of performance measures.

Greed – The takers in our world believe it is their right to grab as much as they can for themselves. These are the children that destroy the sandcastle while fighting to own it.

Government (at the federal and provincial level) – Government is in place to protect and support a higher quality of life and must show leadership in doing so. Politicians dance up and down the continuum between economy and environment trying to find the place with the most votes and in doing so invent phrases like “cap and trade” and “reduction of CO₂ emissions per barrel of oil.” The federal and provincial governments’ misalignment is evidenced in their performance measures and news reports that are stuck on financial and economic based information only. [Atalski, 2007].

Ignorance (unknowing) - Unlike the greedy, the ignorant simply do not have the knowledge base (whether legitimate or convenient) to act appropriately. As smokers cannot connect the dots between smoking and death the enemies of natural systems cannot connect our current life style with the destruction of earth.

Disbelief – While exhibiting much of the same behavior as the greedy and the ignorant, the disbelievers actually believe that the human impact on the earth is immaterial.

They ignore the statistical evidence and use phrases like “nature’s cycle” to conclude everything is fine.

Adapters – A recent and disturbing development has been the appearance of those that suggest it is too late. This group suggests the damage has been done and that humans will engineer ways to adapt. In its most disturbing form this argument suggests that global warming isn’t so bad, in fact it has its benefits. The fallacy of this argument is that the earth gives life and provides for adaptation and that we are facing the ultimate constraint of **macro capacity: the ability of the earth to heal and therefore provide the means of adaptation.**

Linear thinking and systems – Linear thinking and systems are in contrast to circular thinking and systems (what Hawkins [1993] refers to natural systems). Leaving or repairing the infrastructure to enable the regeneration of resources and sustain the quality of life. The effluent of one process becomes the input of another (for example: (1) the sterling engine runs on effluent, (2) malting companies provide heated water to greenhouses growing tomatoes) and the process itself replenishes the earth’s infrastructure. Current business and social practice is linear and is based upon the **false** belief that the earth’s resources are infinite and therefore free.

Misaligned performance measurement systems – “You get what you measure!” is a truism that impacts business (and life) activity. Even if we state that the quality of life is the goal but continue to measure **short run** financial results based upon only those numbers visible to accountants, we will get short run financial results and the quality of life will take a back seat. (Performance measurement is covered in the next section of this report.)

Collectively the above list of enemies provides a formidable force away from environmental restoration. The removal of any of the negative forces shown (big or small) will

weaken the front and movement toward the desired state will begin. From there the physical law of inertia will take over.

Performance Measurement

Lovins, Lovins and Hawkin [1999] refers to the misalignment of performance metrics as a “broken compass.” “If the road ahead is clear, why are so many companies straying or falling by the wayside? We believe the reason is that the instruments companies use to set their targets, measure their performance, and hand out rewards are faulty. In other words, the markets are full of distortions and perverse incentives.” [pg 156]

A challenge to industry is the fact that accounting reports do not see the full cost of disposable products. Due to (North American) industry’s focus on the quarterly earnings report decisions are made based on a ‘cost – benefit’ basis which ignores the long run costs accrued from long run thinking. Another short coming of this analysis is that the calculations are based on the legal entity and ignore the costs and benefits that accrue to supply chain partners and the community as a whole. For example: financial reports do not include the loss of quality of life due to the leaching of chemicals into the communities’ water system. Within today’s business attitude and the accounting rules that support it these are considered externalities. As discussed elsewhere in this paper attitudes are changing in favor of a broader perspective in regard to the scope and responsibility of companies driven by a number of different variables (for example: legislation, consumer demand and conscience). Corporate Social Responsibility seems to be taking hold and impacting environmental behavior for the good. As a result companies are using broad based performance metrics such as balanced scorecard, triple bottom line and the multi goal star.

A performance measurement system that aligns to the quality of life is the triple bottom line. The Triple Bottom Line (TBL) (as ratified by the United Nations in 2007) attempts to

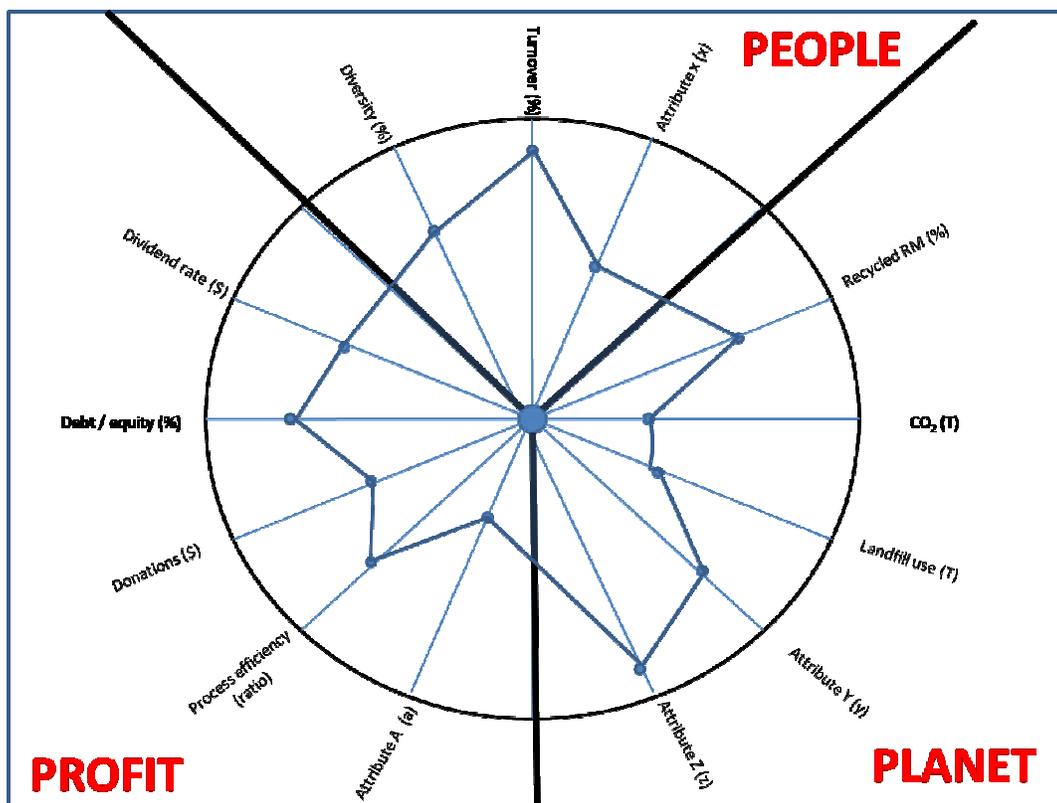
broaden the focus of the organization's measurement system. Unlike the Balanced Scorecard that seems to build up to the financial results as the endpoint, the TBL reflects the three legs of the stool equally with each leg focusing on one of the elements key to sustaining the quality of life. Should one of the elements fall behind the organization will lack stability and falter (one leg will be shorter and the stool will fall over). The three legs of the TBL are:

- People: The fair and ethical treatment of people including those directly employed by the organization, their families and the surrounding community.
- Planet: The environmental practice of the organization. This leg has a number of levels: Legislative compliance, market demands, positive business case and social leadership. Even the later level can be divided into environmentally neutral practices (offsets), zero footprint or restorative practice.
- Profit: More global than the profit reported by the organization in accordance with Generally Accepted Accounting Principles. Profit is the economic well being of the surrounding community as generated by the organization. The two concepts (GAAP based profit and community economic indicators) are reconciled when a (long run) sustainable profit attitude is adopted by the organization. Sustainability (profit, environment and social) requires that the best interests of all stakeholders are attended to in the long run (in contrast to the short run interests of one stakeholder).

The triple bottom line represents an aggregate measure and must be broken into controllable activities to be effective in shaping behavior. This is at the risk of becoming disaggregated and disconnected. The multi goal star may prove useful. The multi goal star has the benefits of combining numerous attributes into one measurement tool, is a visual/graphical

measure and provides instant feedback in regard to what is being done well and what needs to improve and can be cascaded from the board to the front line of the organization with little or no modification. With creative design the star provides a weighting of the attributes. (The first time I saw the star used effectively was “The Alberta GPI Sustainable Well-being Circle Index for 1999” as printed in Anielski, 2007. Pg 44).

The tool lists all attributes being measured around the perimeter of the circle. Each attribute can have its own scale of measurement with the low end at the centre point of the scale and the high end at the perimeter. When complete the result is visual feedback in regard to the current location, areas of immediate concern and importance. The example shown below uses the triple bottom line criteria with some examples (The scores are invented for the sake of the example):



Conclusion

“If all the insects on earth disappeared, within 50 years all life on earth would disappear. If all humans disappeared, within 50 years all species would flourish as never before.”

Jonas Salk

Although the solution to our problem lies within the companies that make up the market economy we must as individuals show leadership in the practice of environmental restoration at home before it can become common place at the office and factory. We must continue to educate ourselves and be proactive in the education of the ignorant and the disbelievers. We must rely on the fact that imperceptible incremental improvement today will grow into dramatic improvement tomorrow.

Nurturing creativity within our companies is a must. The solution lives at a level of thought and action that we have not yet achieved. Value added results come from value added action based upon value added thought based upon value added training and education. Success will come to those who learn well, learn fast and apply the learning.

“Things that get measured get done!” Performance measures must align to goals. They must be leading indicators of progress and areas of improvement and used to communicate what is important in the long run and not be compromised because they are used as part of the reward system [Deming, 1982 and Kohn, 1993]. Management must support the goals and direction of the organization and must not bail when the going gets (financially) tough.

Bibliography

- Achbar, Mark, Abbott, Jennifer, Bakan, Joel (2003). *The Corporation* [Video]. Big Picture Media Corporation. Mongrel Media.
- Anderson, Ray C (1998). *Mid-Course Correction: Toward a Sustainable Enterprise: The Interface Model*. White River Junction, VT: Chelsea Green Publishing Company.
- Anderson, Ray C. video references:
- <http://www.youtube.com/watch?v=RcRDUIbT4gw>
- <http://www.youtube.com/watch?v=xJj0akpSHYQ>
- <http://www.youtube.com/watch?v=C6Mz7YWA9NM>
- <http://www.youtube.com/watch?v=4bAdsJCHGyU>
- Aneilski, Mark (2007). *The Economics of Happiness*. Gabriola Island, BC: New Society Publishers.
- Begley, Ed Jr (2008). *Living Like Ed*. New York, NY: Clarkson/Potter Publishing.
- Brickman, Chris and Ungerman, Drew (July 08). Climate Change and Supply Chain Management. *The McKinsey Quarterly*, 1-3.
- Deming, W. Edward (1982). *Out of the Crisis*. Cambridge, Mass.: Massachusetts Institute of Technology.
- Gifford, J. (1997 September/October). The Value of Going Green. *Harvard Business Review*, (75/5), 11-12.
- Hawken, Paul (1993): *The Ecology of Commerce: A Declaration of Sustainability*. New York, NY: Harper Collins Publishers.

Hawken, Paul, Lovins, Amory and Lovins, L. Hunter (1999): *Natural Capitalism*. New York, NY: Time Warner Book Group.

Johnston, H. Thomas (1992). *Relevance Regained: From Top-Down Control to Bottom-Up Empowerment*. New York, NY: The Free Press.

Johnston, H. Thomas, Kaplan, Robert S. (1987). *Relevance Lost: The Rise and Fall of Management Accounting*. Boston, Massachusetts: Harvard Business School Press.

Kohn Alphonse (1993, September/October). Why Incentive Plans Cannot Work. *Harvard Business Review*. (71/5), 54–61.

Lovins, Amory B., Hunter Lovins, Paul Hawken (1999, May/June). A Road Map For Natural Capitalism. *Harvard Business Review*. (77/3). 144-158.

Lynes, Jennifer K. and Dredge, Dianne. (2006). Going Green: Motivations for Environmental Commitment in the Airline Industry. A Case Study of Scandinavian Airlines. *Journal of Sustainable Tourism*. (14/2). 116-138.

Lustgarten, Abraham. (2004). Lean, mean –and green? *Fortune International (Europe)*. (150/2). 158.

Mintzberg, Henry (1987, July/August). Crafting Strategy. *Harvard Business Review*. (65/4) 66–75.

Porter, Michael E. and van der Linde, Claas. (1995, September/October) Green and Competitive: Ending the Stalemate. *Harvard Business Review*. (73/5). 120-134.

Porter Michael and Kramer M (2006, December). Strategy and Society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78-92.

-
- Preston, L. (2001). Sustainability at Hewlett-Packard: From Theory to Practice. *California Management Review*, (43/3), 26-37.
- Reid, Peter C. (1990). *Well Made in America: Lessons from Harley-Davidson on Being the Best*. New York, NY: McGraw Hill Publishing Company.
- Sawhney, Apama, and Jose, P.D. (2003, September). The Greening of Business Strategy: From Compliance to Competitive Advantage. *IIMB Management Review*. (15/3), 130-133.
- Schonberger, Richard J. (1990) *Building a Chain of Customers: Linking Business Functions to Create The World Class Company*. New York, NY: The Free Press.
- Willard, Bob (2002) *The Sustainable Advantage: Seven Business Case Benefits of a Triple Bottom Line*. Gabriola Island, BC: New Society Publishers.
- Willard, Bob (2005) *The Nest Sustainable Wave: Building Boardroom Buy-In*. Gabriola Island, BC: New Society Publishers.
- Willard, Bob (Writer), Black, Adam (Producer). (2008). *The Business Case for Sustainability* [Video]. New York, NY: Double Wide Media.
- Willard, Bob (2008). Smart Sustainability Strategies That Drive the Bottom Line [Presentation], CMA/CAM-I Summit, Toronto, October 22, 2008.