



Building Competitive Advantage in the 21st Century



Bruce Piasecki

Prepared for the Centre for Sustainable Design

The AHC Group · 4 Franklin Square · Saratoga Springs, NY

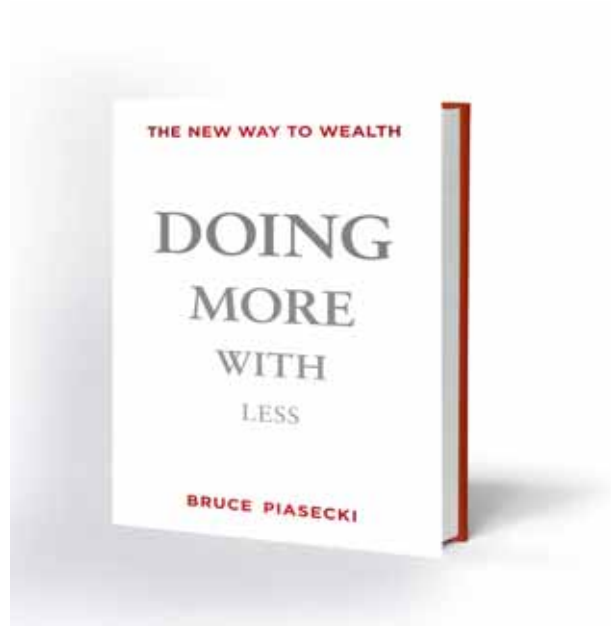


Those that have shaped our view

AHC Group Corporate Affiliates 2011

- AECOM
- Aerojet
- Agrium
- ARCADIS
- ArvinMeritor
- Aztech Technologies, Inc.
- Bayer Crop Science
- Canadian National
- Celanese Americas Corporation
- CH2MHill
- Chrysler
- ConAgra
- CSX
- Deloitte
- Delta Partners
- Dow Chemical Company
- DTE Energy
- DuPont
- Energy Answers International
- Enolia Energy S.A.
- Faegre & Benson LLP
- FMC Corporation
- Future 500
- Glenn Springs Holdings (Oxy)
- Hess
- IHS
- Irbaris
- Koch Industries
- Masco Corporation
- Northrop Grumman
- Oncor Electric Delivery
- Owens Corning
- Pacific Gas & Electric (PG&E)
- Shaw Industries
- Shell Oil Company
- Shumaker, Loop & Kendrick, LLP
- Suncor Energy Inc.

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Doing More With Less: The New Way to Wealth

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Chapter Five: **An Idler in the City**: Capitalism is Where We Live

Chapter Six: **Another Day Will Tell**

*To learn more about Bruce Piasecki's books, please visit www.worldinc.com
To learn more about Bruce Piasecki's firm, please visit www.ahcgroup.com
To receive your 40% discount on your order of 50 – 100 copies of
Doing More With Less: The New Way to Wealth, contact marti@ahcgroup.com*

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What did I learn from writing “Doing More With Less”?



IQ is less than 20% of success
The rest is the ability to motivate yourself, the ability and desire to focus your teams, persistence from day to day, and the art of competitive frugality.



Complicating realities
The reason persistence is a differentiator in a world of scarcity is that often invention and creativity requires action in times of diminished resources.



What Skills Can YOU Learn From Reading This Book?

- One can refine the ability to retrigger moods and moves despite immediate hot emotions
- Go from Shakespeare’s “hotspur” to a more reasoned action-based status
- How? Simple tools like keeping a self diary that moves you to discover self-restraint and social value in your competitiveness

Bottom Line: These elements of human nature are the source of what the ancients called character and will.



About The AHC Group

The AHC Group team and client logos are displayed in a grid. On the left is a portrait of Bruce Piasecki. In the center are logos for Toyota, Whirlpool, HP, Shaw, and GM. On the right is a group photo of six team members.

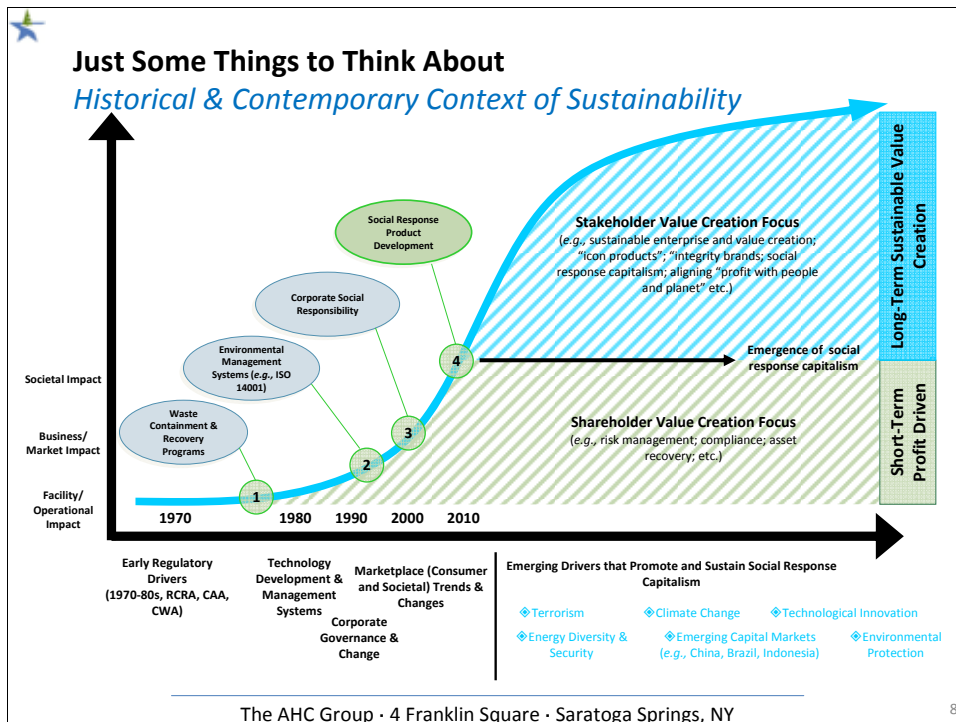
President & Founder, Bruce Piasecki

30 years of experience in corporate strategy & social response

Team of Senior Associates with years of executive experience & expertise

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Where do sustainable design and business converge?



Product



Processes



People



Where do sustainable design and business converge?



Product



Processes



People



Corporations Have an Imperative to Invest in Sustainable Design

This is about...

linking leadership with sustainability and innovation toward the shifting values of society...

Which directly ties to corporate performance on...

Revenue
Reputation
Reporting



Boeing's 787 Dreamliner is an Example of Sustainable Design Providing Competitive Advantage



Key Impacts

- GHG Emissions
- NO_x Emissions
- Noise Pollution
- Resource Inputs
- Routing inefficiencies

20% reduction in fuel consumption: Improved fuel consumption from new engines, light-weight materials, and modern aerodynamics

30% reduction in NO_x emissions: Improved engine technology

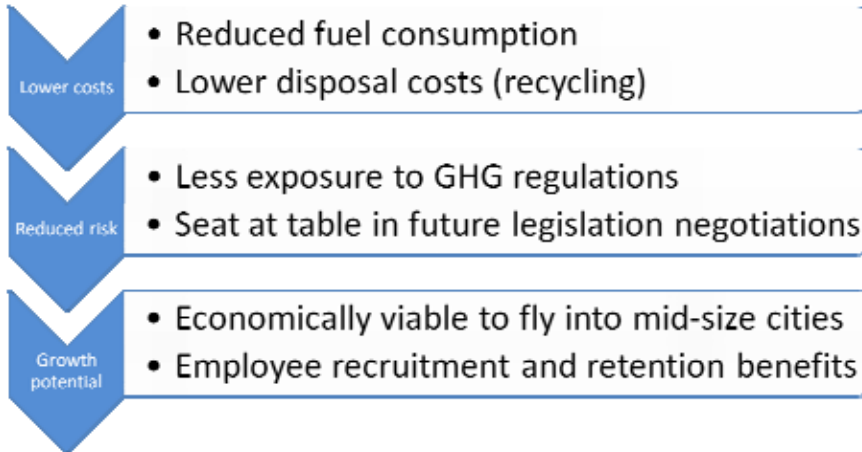
60% reduction in noise pollution: Acoustically treated engine inlets and chevrons

Reduced manufacturing waste, End-of-life recycling: Manufactured with carbon composite materials instead of aluminum

Reduced travel congestion: Economically viable to fly to mid-size cities; less congestion at hubs and unnecessary connections



Boeing's Investments in Sustainable Design Will Pay Clear Dividends for the Company



Where do sustainable design and business converge?





Multiple Drivers Are Leading Companies to Invest in “Greening” their Internal Processes



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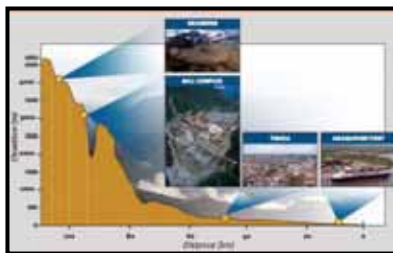


Freeport McMoRan’s Riverine Tailings Management System Addresses a Unique Situation

Issue: How to responsibly handle “tailings” (finely ground rock left after ore is removed) from a copper mine in Papua New Guinea.

Context:

- The mine is 4,000 meters above sea level in a seismically active area
- The region receives heavy precipitation
- Harsh terrain makes a pipeline infeasible
- A wide ocean shelf and shallow waters rule out deep-water discharge



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Solution: Freeport engineered a Tailings Management System that utilizes the Otomona River to carry tailings from the mountains to the sea in a controlled manner.

Risk

Mitigation Strategy

Contamination from tailings

- Monitoring plan that analyzes aquatic biology, aquatic tissue, plant tissue, mine water, surface water, ground water, sanitary wastewater, and river sediments.

Land use

- Reclamation and revegetation program that includes developing agricultural and animal husbandry opportunities.

Resentment from local population

- Compensation for traditional users of tailings area and investment into local infrastructure.



Where do sustainable design and business converge?



Product



Processes



People



New Market Dynamics Dictate that Companies Pay More Attention to Sustainable Design

Lifestyles of Health and Sustainability (LOHAS) is a growing market segment in the United States that is composed of 41 million adults and represents a market opportunity of \$290 billion.



Companies can capitalize on this trend by producing products that allow consumers to live in a more sustainable manner.



Masco's "Environments for Living" Products Provide Value to Consumers by Helping them Save on Utilities



Homes in the **Environments for Living Certified Green** Program:

- ✓ Save at least 20% on household energy costs
- ✓ Save at least 20% on indoor water usage
- ✓ Have at least 20% lower GHG emissions

Environments for Living Snapshot

Launch Date	2001
Total Homes	130,000+
Areas of focus	Energy efficiency, Durability, Indoor Environmental Quality, Water efficiency
Key Sponsors	GE, Owens Corning, Lennox, Demilec, Shaw Industries
Tiers	Environments for Living; Environments for Living Certified Green



Opportunities Abound for Firms to Profit by Helping Consumers Live Sustainably



Home energy monitors



Specialized apps



Grey water systems



Summary



Product



Processes



People

Companies are compelled to consider sustainable design in relation to:

1. The impact of their **products**
2. The impact of their internal **processes**
3. How their products enable **people** who buy them to live sustainably

Bottom Line: The firms that are able to best align their strategy with these trends, those who can do more with less, will be positioning themselves for future growth.