



## **Sustainable Minds™ Introduces Software Suite for Ecologically Sustainable Product Design Using Life Cycle Assessment in a Collaborative Workspace**

*On-demand service gives organizations powerful sustainability knowledge and tools for rapid, iterative assessment of greener product concepts in early stages of design*

**Monterey, CA. June 3, 2008** – SustainableMinds.com™ was announced today at the Sustainable Brands '08 conference. It is the first Web-based, early-stage design tool that forecasts a product's life cycle environmental and human health impacts in a collaborative workspace with continuously updated information services. SustainableMinds.com is targeted at product designers and engineers, sustainability managers, product managers, design consultancies and manufacturing companies who are championing sustainable products or responsible for complying with sustainability requirements or directives. Created by leading product design practitioners and educators, the science behind SustainableMinds.com is Okala™, a comprehensive ecological design course and the first North American Life Cycle Assessment (LCA) methodology. Using powerful Web 2.0 capabilities and leveraging existing product design tools, SustainableMinds.com develops the skills and knowledge of design organizations to grow revenue and markets through sustainable product innovation.

Environmental pressures and sustainable business challenges – such as climate change, ecological and human health damage, resource depletion, social equity, regulation, brand reputation and cost and risk reduction – are impacting the way companies make products. Companies are setting operational sustainability goals, but are not yet able to consistently apply them to the design and manufacture of their products, as there are no standards for 'sustainable' products. Product design teams are being asked to assess the impacts of the products they develop and understand how design changes affect the products' life cycle performance, while uncovering opportunities for innovation.

"The problem we are solving is to help product teams learn how to design more ecologically sustainable products, and understand the impacts of their design decisions early enough in the process so they can design a greener product from the start," says Terry Swack, CEO and Co-founder of Sustainable Minds. "Operationalizing sustainable product design starts with bringing life cycle thinking and a whole product systems approach to the front of the design process. The result is more sustainable, innovative products, lower costs by eliminating re-engineering, and greater competitive advantage."

SustainableMinds.com's subscription-based service connects environmental performance goals with design decisions and business goals by enabling design knowledge sharing in a social software-based collaborative environment. Customers can access best strategies, products, materials, and regulatory updates from industry experts and peers, along with assessment-based case studies and benchmarks. SustainableMinds.com also supports LCA from CAD and product life cycle management tools. Continuously updated Okala Impact Factors allow design teams to perform what-if comparisons of existing products or new design concepts based on 10 environmental impact categories, or just global warming impacts, measured in CO2 equivalents.

The SM Blog featuring industry-leading thinkers, practitioners and business people and 'Ask the Okala Experts' are launching later this month. Software suite availability is scheduled for Fall 2008. For more information, visit [SustainableMinds.com](http://SustainableMinds.com).

### **About Sustainable Minds**

Sustainable Minds' mission is to mainstream sustainable product design in an accessible, empowering and credible way. To do this, it has integrated deep knowledge of product design, life cycle assessment and environmental systems design with expertise in Web-based business, software design and customer experience. Sustainable Minds is committed to helping create sustainable products that are environmentally beneficial, economically viable and socially and ethically equitable. More information about Sustainable Minds, founded in 2007 and headquartered in Cambridge, Massachusetts, can be found at [www.sustainableminds.com](http://www.sustainableminds.com).

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## Corporate backgrounder | June 2008

### Contact

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The screenshot shows the Sustainable Minds website homepage. At the top right, there are links for 'Get updates' and 'Contact'. The main navigation bar includes 'SOLUTION', 'OKALA', 'ASK THE EXPERTS', 'BLOG', 'COMPANY', and 'CAREERS'. The central banner features the headline 'Design greener products, right from the start.' with a sub-headline: 'Give your design organization the knowledge and tools it needs to create sustainable and innovative products from the beginning of the design process.' To the right of the banner is a large green leaf graphic with the text 'Okala™ Learn it and use it.' and a question: 'Does your company want to make greener products, but not sure how? Already making greener products? Greener than what?'. Below the banner are three columns: 'OUR SOLUTION' (introducing SustainableMinds.com™), 'ABOUT US' (mission and expertise), and 'COMPANY UPDATES' (recent news items like 'June 03: SM's CEO Terry Swack at SustainableBrands08!').

Introducing SustainableMinds.com™, an on-demand, Web-based software and information suite that answers the questions: “What is sustainable design?” and “How can we make it work for us?”. At the core is design decision support software that enables environmental life cycle assessment and rapid iteration of product concepts in the earliest stages of design.

SustainableMinds.com integrates the science of Okala™ with existing product design tools and powerful Web 2.0 capabilities to promote efficiency, risk and waste reduction, and to develop the skills and knowledge of designers and their organizations to grow new revenue and markets through sustainable product innovation.

## Challenge

### Environmental pressures and sustainability business challenges are changing how companies make products.

Climate change, ecological and human health damage, resource depletion and social equity – plus the 6 R’s driving sustainable business: resource costs, regulatory, reputation, risk, reduction and revenue – are creating increasing change.

- **Companies** are setting operational sustainability goals, but don’t know how to apply them to the design and manufacture of their products.
- **Marketers** are struggling with how to meaningfully promote the ‘green’ attributes of products.
- **Product design teams** are being asked to assess the impacts of their products and understand how design changes affect the products’ life cycle performance, while uncovering opportunities for innovation.

Currently, there is no standardized way to address these requirements. There is no such thing as a ‘green’ product. Further, most product design organizations simply don’t know how to approach sustainable design.



## What is sustainable design?

Sustainable design means creating products that through their life cycle are:

- **Environmentally beneficial: by eco-efficient & eco-effective design**
- **Economically viable: by innovative & competitive design**
- **Socially and ethically equitable: by fulfilling the needs of all stakeholders**

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## Opportunity

**Operationalize sustainable product design.** Because 75% of manufacturing costs are committed by the end of the concept stage, a product's environmental life cycle performance is also locked in. Decisions about materials, energy, recyclability and longevity have determined the life cycle performance. It's simply too expensive to change the design later.

Product concepts are numerous and loosely defined, and time, available data and budgets limit the ability to create detailed models to conduct 'what-if' analysis at early design stages. Now environmental impacts also need to be considered in evaluating concepts.

Life cycle assessment (LCA) can be used to assess the 'green-ness' of products and identify opportunities for improvement and innovation throughout their life cycle. However, the cost, time and expertise required for full-scale LCAs are beyond the reach of most product teams – and cannot be used for loosely defined or rapidly evolving product concepts.

**Operationalizing sustainable product design starts with bringing life cycle thinking and a whole product systems approach to the front of the design process.** The result is more sustainable, innovative products, lower costs by eliminating re-engineering, and greater competitive advantage!

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## Solution

**Empower product design organizations to operationalize sustainability.** Introducing SustainableMinds.com™, an on-demand, Web-based software and information suite that answers the questions: "What is sustainable design?" and "How can we make it work for us?". At the core is design decision support software that enables environmental life cycle assessment and rapid iteration of product concepts in the earliest stages of design.

SustainableMinds.com integrates the power of Okala™ with existing product design tools and powerful Web 2.0 capabilities to develop the skills and knowledge of designers and their organizations to grow revenue and markets through sustainable product innovation.

### SustainableMinds.com helps your organization:

- **Connect environmental performance goals with design decisions and business goals.** Use LCA to make iterative, rapid evaluations of design options early on.
- **Manage sustainable product design knowledge in a collaborative environment.** Develop, collect and share sustainable product design knowledge across your organization to document, learn from and reuse project information in a social software-based environment.
- **Stay informed with information services.** Learn about the best strategies, products, materials, and regulatory updates from industry experts and peers – plus assessment-based case studies and benchmarks.
- **Leverage your CAD and PLM tools.** SustainableMinds.com supports LCA from CAD and product life cycle management tools.

### Later this month

Ask the Okala Experts and the SM Blog go live! Answers to questions from the Okala authors and a unique and knowledgeable group blogging on a broad range of sustainable product topics.

Sign up for updates!  
[sustainableminds.com](http://sustainableminds.com)

## Okala™ – Learn it and use it.

**Both a teaching tool and a life cycle assessment methodology.** Okala\* helps product teams learn how to design more ecologically sustainable products – and understand the environmental impacts of their design decisions.

- **Okala is a comprehensive course** for product design organizations, practitioners and students to learn to create, develop, and manufacture more ecologically sustainable products.
- **Okala is the first life cycle assessment methodology** for evaluating potential ecological and human health impacts from products used in North America.

Okala was created by leading product design practitioners and educators, Philip White, Louise St. Pierre and Steve Belletire, with support from Eastman Chemical, Whirlpool and the IDSA/EPA Partnership. It is being used 40+ design and engineering schools in North America, and supported by industry and product design leaders.

**Okala™ is the science behind SustainableMinds.com.**



**Okala is the first life cycle assessment methodology for evaluating potential ecological and human health impacts from products used in North America.**

**Continuously updated Okala Impact Factors allow design teams to perform what-if comparisons based on 10 impact categories, or just global warming impacts, measured in CO2 equivalents. Okala uses TRACI<sup>1</sup> impact categories developed by the U.S. EPA, North American normalization and weighting values developed by the EPA<sup>2</sup> and NIST<sup>3</sup> respectively, and process inventory data from the most credible sources worldwide.**

1 Tool for Reduction and Assessment of Chemical and other Environmental Impacts, 2005

2 United States Environmental Protection Agency, 2006

3 National Institute for Standards and Technology, 2006

\*The word Okala is Hopi, meaning 'life sustaining energy'. The interpretation is central to both the problems and the objectives of the course. The energy that we use to create, develop, manufacture and use products can sustain life on this planet, rather than deplete it.

## Team

**Sustainable Minds' mission is to bring sustainable product design into mainstream product design and manufacturing in an accessible, empowering and credible way.** To do this, we have integrated our knowledge of product design, life cycle assessment and environmental systems design with expertise in Web-based business and software design. The result is powerful functionality delivered by innovative Web technology with the best customer experience!



**Terry Swack, Co-founder & CEO** Terry is an Internet and environmental entrepreneur and a pioneer in a customer experience strategy and design. In 2005, she founded and served as CEO of The Beam and GreenBuildingBlocks.com, a Web 2.0 marketplace for consumers, manufacturers, and green building professionals to power the demand for clean and green products and services. In 2002, Terry served as a founding management team member of network security software company StillSecure. Co-leading the product teams, they brought three best-of-breed products to market in 18 months. Her first company TSDesign, an Internet strategy and product design firm was acquired in 1999 by Razorfish.



**Inês Sousa, Ph.D., Co-founder & Product Manager** Inês brings a proven track record of success connecting product design and engineering with sustainability. For her doctoral dissertation, Inês developed a new machine learning based approach for companies to timely incorporate environmental assessment and life cycle thinking up-front in their product development cycles. She holds a Ph.D. in Environmental Systems Design, and a Master of Engineering in Environmental and Water Quality Engineering, both from MIT.



**Philip White, IDSA, VP Sustainable Product Design** Philip is an ecological design strategist who develops ecologically intelligent products and systems. He specializes in helping practitioners and students apply ecodesign strategies and advanced environmental impact assessment methods. He organized the development of Okala, and advises on impact assessment to the Sustainable Products Purchasers Coalition and the LifeCycle Initiative of the United Nations Environmental Programme. Philip received a BS in mechanical engineering from the U. of Kansas, and a Masters of 3D design from Cranbrook Academy. He is an Assistant Professor of ID, and School of Sustainability at ASU.



**Brian Sanders, VP Technology** Brian brings extensive experience working with Internet start-ups to build out technology teams and platforms. Most recently, Brian was Director of Business Intelligence at Miva, Inc. where he oversaw the creation of BI systems and company-wide governance mechanisms. Prior to that role, he served as Manager of Engineering, leading development efforts for consumer-facing Internet applications. Brian received a BA from the Umass, Amherst and is completing his MBA at NYU's Stern School of Business.

**Greg Canavera, Director, Software Design** Greg brings 10 years of experience designing Web-based software and large-scale Web sites. He has extensive experience with start-ups and early-stage product design, designing great products right from the start. His multidisciplinary skill-set includes product strategy, interaction design, information architecture, visual design and branding. Previous experience includes design team positions with The Beam and GreenBuildingBlocks.com, StillSecure, Razorfish and TSDesign.

**Plus domain experts: Steve Belletire, Louise St. Pierre**

#### Advisors

- Mitchell Ashley – Chief Strategist, Converging Networks LLC
- John Davies – VP Green Research, AMR Research, Inc.
- Jim Giebutowski – Director, AEC Strategic Initiatives, Autodesk
- W. Bradley Holtz – President & CEO, Cyon Research
- Wendy Lea – former VP eBusiness Consulting, Siebel Systems
- Keith Lehman – former Chief Architect, WebGen Systems, Inc.
- Jim Smith – former VP Marketing & Sales, CircleLending
- Edward Weisberg, GM TekScout, VP, UTEK Corporation

#### Partners

Sustainable Minds is proud to partner with the industry leaders in CAD and PDM software: SolidWorks, Autodesk, and PTC. Through these partnerships we are able to offer integrated solutions with the tools you already know and trust.

Sustainable Minds is also proud to have many leading product design and manufacturing companies in our Founding Partner Program, who are moving forward with sustainable design initiatives.