CAN GRAPHIC DESIGNERS SAVE THE PLANET?

The Living Principles
The Living Principles

WHAT ARE THE LIVING PRINCIPLES FOR DESIGN?

Just because it’s Green it doesn’t mean it’s Sustainable Design.

THE NEED

As one of the defining ideas of the 21st century, sustainability holds tremendous possibilities for the creative community, its business partners and society. And while 87% of recently surveyed AIA members view sustainability as a top priority, many of them worry they are ill-equipped to apply its principles effectively. Sustainability is complicated. The decentralized nature of resources, the complexities of the issues and the lack of clear planning for how they relate to design appear to be the main barriers for turning motivation into action. Everyone wants to do the right thing, but no one relishes attaching this knowledge to itself.

The Living Principles for Design distill the collective wisdom found in decades of sustainability theories and bring them to life in a first quadruple bottom-line framework for design. The Living Principles weave together environmental protection, social equity, and economic health—thus building upon commonly accepted, triple-bottom-line frameworks. But most significantly, they incorporate cultural vitality because culture is where all aspects of sustainability find their way into the bloodstream of society, and culture is where designers have the deepest impact on their environments and obvious shape culture and values.

The Living Principles framework is a lens that brings clarity to integrated sustainability and makes it accessible, relevant and easy to put into action.

THE APPROACH

SHARE IT

Use it in everything you do.

ENRICH IT

TEACH IT

LIVE IT
THE VISION

“Throughout history, design has been an agent of change. It helps us to understand the changes in the world around us, and to turn them to our advantage by translating them into things that can make our lives better.”

World Economic Forum
The Living Principles framework is a lens that brings clarity to integrated sustainability and makes it accessible, relevant and ready to put into action.

**Design Impact**
Design is a powerful conduit for change. As the messages, artifacts and experiences we create pass through the hands, minds and hearts of people, we have an opportunity to weave sustainability into the broader fabric of culture and to shift consumption and lifestyle aspirations to a more sustainable basis for living. In order for individuals, societies, economies and the planet to flourish, we must support environmental responsibility, social equity, economic health and cultural vitality and recognize that they are intricately linked. The Living Principles for Design form a practical framework that illustrates the confluence of these four streams—the key to sustainable design.

**FOUR STREAMS OF INTEGRATED SUSTAINABILITY**

**Environmental Protection**
- Actions And Issues That Affect Natural Systems, Including Climate Change, Preservation, Carbon Footprint And Erosion Of Natural Resources
- Social Equity
- Economic Health
- Actions And Issues That Affect How People And Organizations Meet Their Basic Needs, Erode And Undermine Economic Success And Growth
- Cultural Vitality
- Actions And Issues That Affect How Communities Manifest Identity, Preserve And Cultivate Traditions, And Develop Relief Systems And Commonly Accepted Values

**ENVIRONMENTAL PROTECTION**
- Learn and informed about the uncontrolled impacts of choices and behaviors. Consider mandated and unmandated ecological consequences of components over the entire lifecycle, including extraction of raw materials from nature, conversion of materials into artifacts, use/reuse, transportation, disposal, and recycling.

**SOCIETY**
- Consider the entire supply chain. Seek sustainable suppliers and clean production technologies at every step. Plan to optimize shipping volumes and transportation distances.

**ECONOMY**
- Eliminate waste. Maximize use of recycled, renewable and compostable materials. Plan for use of materials in continuous cycles including disassembly, ease of recovery, take-back programs, recycling and reusing. Avoid the use of any substances that may cause environmental damage to air, water or the earth.

**CULTURAL VITALITY**
- Consider appropriate durability so that materials last longer or decompose more easily. Design for multiple functions and reusability to encourage reuse.

**MINIMIZE ENERGY USE**
- Maximize use of clean energy sources such as wind and solar in manufacturing, transportation and product use.

**SOCIAL EQUITY**
- Create messages, artifacts, services and experiences that respond to the needs of all people, underpin beauty and promise and enable joyful, healthy living. Consider intended and unintended consequences for individuals and communities from all components over the entire lifecycle, including impacts on human health, water pollution, cancer-causing potential, resource depletion and climate change.

**ECONOMIC HEALTH**
- Understand the ethical supply chain to ensure that products and services are manufactured under safe and fair labor conditions, supporting human rights and basic needs like sufficient pay, healthcare and benefits.

**MINIMIZE ENVIRONMENTAL AND SAFETY RISKS TO EMPLOYEES AND COMMUNITIES INVOLVED IN MANUFACTURING, USE, AND END-OF-LIFE SCENARIOS WITHafe technologies, facilities and operating procedures.

**Professional Practices**
- The Living Principles for Design are meant to guide purposeful action. They will evolve, grow and draw openly from a wide range of professional practices.

Join our feedback loop on Facebook and help ensure and share tried-and-true best practices, guidelines, tools, ideas, case studies, and general support for a broad range of design disciplines, including:

- Communication Design
- Packaging Design
- Experience Design
- Interaction Design
- Fashion Design
- Industrial Design
- Architecture
- Interior Design
- Service Design
ABOUT THE LIVING PRINCIPLES

ARCHITECTS

Gaby Brink / Co-chair
AIGA Center for Sustainable Design www.sustainability.aiga.org Executive Creative Director Founder	Tomorrow Partners 510-644-2332 x209 gbrink@tomorrowpartners.com www.tomorrowpartners.com

Nathalie Destandau
Strategy Committee Chair
AIGA Center for Sustainable Design www.sustainability.aiga.org Director of Business Strategy Tomorrow Partners 510-644-2332 x209 ndestandau@tomorrowpartners.com www.tomorrowpartners.com

Phil Hamlett
Co-chair
AIGA Center for Sustainable Design www.sustainability.aiga.org Graduate Director, Graphic Design Academy of Art University 415-618-6321 phamlett@academyart.edu

AUTHORS

ADDITIONAL CONTRIBUTORS

The seeds of the Living Principles sprouted in February 2009, at the Compostmodern conference, and were cultivated in other events like Adobe Systems’ Sustainability Roundtable in the spring. Genesis of this specific approach began at the AIGA Leadership Retreat in Portland (June 2009). The core architects emerged from that event, pulled together the Genealogy research documents, and invited an interdisciplinary advisory board to a strategy workshop in San Francisco in August. The harvest of that day’s activities found its way onto the Living Principles, which were vetted across a wide review board.

SFI Summit Attendees
- Allison Arnett
- Gaby Brink
- Valerie Casey
- Nathalie Destandau
- Brian Dougherty
- Valerie Elliott
- Ric Galé
- Lynn Gomos
- Phil Hamlett
- Jamie Koval
- Clement Miuk
- Susan Rodriguez
- Laura Moen

One serious problem for designers is that, even with a systems approach, there are few tools in existence that wrap these issues together. Instead, designers must learn to match together a series of disparate approaches, understandings, and frameworks in order to build a complete solution.

In developing the Living Principles for Design, our goal was to distill the collective wisdom found in decades of sustainability theories and make it accessible to a broad audience of design practitioners and their clients.

To answer a meaningful opportunity, we started by looking at the landscape of the major sustainability visions, manifestos, principles, frameworks and tools that have been developed over the past 30 years and that are relevant to design. We think of this research document as the genealogy of the Living Principles. It is also a chronology and a picture of a system – an invitation for further discovery.

Upon close investigation, we noticed some trends:
- Many of the principles and frameworks focus squarely and solely on environmental sustainability.
- Several are based on a systems approach, but this does not necessarily add relevance for designers beyond the environmental and social realms.
- Some of the tools and frameworks that appear very useful are not widely used or adopted.
- There are countless resources for material choices, production techniques, energy waste and even on the social impact of design. However, few address design’s impact on culture and the role culture plays in sustainability.

So while a lot of good and useful information already exists, it is fragmented. It is also missing a compelling case for looking at design’s impact on trends and habits. We believe that for sustainable design to be attainable, designers need a common understanding of the interdependence of all four streams of sustainability – environmental protection, social equity, economic health and cultural vitality.

The Living Principles for Design stand on the shoulders of giants. The DNA of their work will become evident as you peruse this genealogy.

Nathan Shubert, Design is the Problem: The Future of Design Must be Sustainable, 2009

Join our feedback loop on Facebook and help us create and share tried-and-true best practices, guidelines, tools, case studies, and general support for a broad range of design disciplines.
When the World Economic Forum met in Dubai in November 2008, a council of de When the World Economic Forum met in Dubai in November 2008, a council of designer was asked:

Designers were asked:

- What is the state of the world on this issue [design thinking] and how is the economic crisis impacting this issue?
- What should be done to improve the state of the world on design and by whom? The response is a manifest that runs closely to messages of Agenda.

On Design

Through history, design has been an agent of change. It helps us understand the changes in the world around us, and to turn those to our advantage by translating them into things that can make our lives better. Now, at a time of crises and unprecedented change in every area of our lives—economic, political, environmental, social—and in science and technology—design is more valuable than ever. The crisis comes at a time when design has evolved. Once a tool of consumption chiefly involved in the production of objects and images, design is now also engaged with developing and building systems and strategies, and in shaping behavior when in collaboration with different disciplines.

Design is being used to:
- Gain insight about people's needs and desires
- Build strategic foresight to discover new opportunities
- Generate creative possibilities
- Invent, prototype and test novel solutions of value
- Deliver innovation to the world as innovations adapted at scale

In the current climate, the biggest challenges for design and also its greatest opportunities are:

Well-being

Design can make an important contribution to the redress and delivery of social services by addressing acute problems such as aging, youth crime, housing and health. Many designers are striving to enable people all over the world to find their lives with dignity, especially the deprived majority of the global population—the other 90%—who have the greatest need of design innovation.

Sustainability

Designers can play a critical role in ensuring that products, systems and services are developed, produced, shipped, sold and eventually disposed of in an efficiently and environmentally responsible manner. They can meaningfully and purposefully expand our expectations.

Learning

Design can help to rebuild the education system to ensure that it is fit for its purpose in the 21st Century. Another challenge is to redefine or reorient the design education system at a time of unprecedented demand when thousands of new design schools are being built worldwide and design is increasingly being integrated into other disciplines. Designers are also deploying their skills in communication and visualization to explain and interpret the overwhelming volume of extraordinarily complex information.

Visions

When the World Economic Forum met in Dubai in November 2008, a council of designer was asked:

On Design

Through history, design has been an agent of change. It helps us understand the changes in the world around us, and to turn those to our advantage by translating them into things that can make our lives better. Now, at a time of crises and unprecedented change in every area of our lives—economic, political, environmental, social—and in science and technology—design is more valuable than ever. The crisis comes at a time when design has evolved. Once a tool of consumption chiefly involved in the production of objects and images, design is now also engaged with developing and building systems and strategies, and in shaping behavior when in collaboration with different disciplines.

Design is being used to:
- Gain insight about people's needs and desires
- Build strategic foresight to discover new opportunities
- Generate creative possibilities
- Invent, prototype and test novel solutions of value
- Deliver innovation to the world as innovations adapted at scale

In the current climate, the biggest challenges for design and also its greatest opportunities are:

Well-being

Design can make an important contribution to the redress and delivery of social services by addressing acute problems such as aging, youth crime, housing and health. Many designers are striving to enable people all over the world to find their lives with dignity, especially the deprived majority of the global population—the other 90%—who have the greatest need of design innovation.

Sustainability

Designers can play a critical role in ensuring that products, systems and services are developed, produced, shipped, sold and eventually disposed of in an efficiently and environmentally responsible manner. They can meaningfully and purposefully expand our expectations.

Learning

Design can help to rebuild the education system to ensure that it is fit for its purpose in the 21st Century. Another challenge is to redefine or reorient the design education system at a time of unprecedented demand when thousands of new design schools are being built worldwide and design is increasingly being integrated into other disciplines. Designers are also deploying their skills in communication and visualization to explain and interpret the overwhelming volume of extraordinarily complex information.

Visions

When the World Economic Forum met in Dubai in November 2008, a council of designer was asked:

On Design

Through history, design has been an agent of change. It helps us understand the changes in the world around us, and to turn those to our advantage by translating them into things that can make our lives better. Now, at a time of crises and unprecedented change in every area of our lives—economic, political, environmental, social—and in science and technology—design is more valuable than ever. The crisis comes at a time when design has evolved. Once a tool of consumption chiefly involved in the production of objects and images, design is now also engaged with developing and building systems and strategies, and in shaping behavior when in collaboration with different disciplines.

Design is being used to:
- Gain insight about people's needs and desires
- Build strategic foresight to discover new opportunities
- Generate creative possibilities
- Invent, prototype and test novel solutions of value
- Deliver innovation to the world as innovations adapted at scale

In the current climate, the biggest challenges for design and also its greatest opportunities are:

Well-being

Design can make an important contribution to the redress and delivery of social services by addressing acute problems such as aging, youth crime, housing and health. Many designers are striving to enable people all over the world to find their lives with dignity, especially the deprived majority of the global population—the other 90%—who have the greatest need of design innovation.

Sustainability

Designers can play a critical role in ensuring that products, systems and services are developed, produced, shipped, sold and eventually disposed of in an efficiently and environmentally responsible manner. They can meaningfully and purposefully expand our expectations.

Learning

Design can help to rebuild the education system to ensure that it is fit for its purpose in the 21st Century. Another challenge is to redefine or reorient the design education system at a time of unprecedented demand when thousands of new design schools are being built worldwide and design is increasingly being integrated into other disciplines. Designers are also deploying their skills in communication and visualization to explain and interpret the overwhelming volume of extraordinarily complex information.
THE PRINCIPLES

THE CERES PRINCIPLES
THE EIDD STOCKHOLM DECLARATION
THE HANNOVER PRINCIPLES
GRAPHIC DESIGN CANADA’S SUSTAINABLE PRINCIPLES
THE WINDSPREAD STATEMENT ON THE PRECAUTIONARY PRINCIPLES
IDSA ECO DESIGN PRINCIPLES AND PRACTICES
AMERICAN INSTITUTE OF ARCHITECTS SUSTAINABLE ARCHITECTURAL PRACTICE POSITION STATEMENT
THE DESIGNERS ACCORD
KYOTO DESIGN DECLARATION

“Nature can survive without humanity but society is dependent on the biosphere for crucial services. Society’s systematic destruction of the biosphere threatens nature’s health and its capacity to sustain human society.”

IDSA Eco-Design Principles And Practices
Sustainable Architectural Practice

The AIA recognizes a growing body of evidence that demonstrates current planning, design, construction, and real estate practices contribute to patterns of resource consumption that noticeably jeopardize the future of the Earth’s population. Architects need to accept responsibility for their role in creating the built environment and, consequently, believe we must alter our profession’s.

Principles

AIAA Center for Sustainable Design Paginations and encourage our clients and the entire design and construction industry to join us in changing the course of the planet’s future.

Explanations

Aging current practices of design and construction to realize significant reductions in the use of natural resources, non-renewable energy sources, and waste production and promote regeneration of natural resources will require a multi-year effort in conjunction with clients, industry partners, and concerned organizations. To achieve these changes, the AIAA will act through all its Board Committees, Knowledge Communities, Task Forces, Working Groups, and related activities to:

Promote sustainable design including resource conservation to achieve a minimum 50 percent reduction from the current level of consumption of fossil fuels used to construct and operate new and converted buildings by the year 2010, and promote further reductions of renewable fossil fuel consumption by 10 percent or more in each of the following five years;

Collaborate with other national and international organizations, the scientific research community, public health community, and industry leaders engaged in issues related to sustainable / resilient design to facilitate the dialogue, share knowledge, and accelerate the rate of change for all those seeking to improve the industry’s current practices and utilize integrated approaches to achieve a sustainable future;

Develop and promote the integration of sustainability into the curricula for education of architects and architectural students to enhance their design skills;

Develop standards for the architectural professions that incorporate greater sustainability into design, education, management, and certification standards and provide resources to assist integrating these standards into the daily practices of all architects;

Promote documentation of the measurable contributions resulting from implementation of sustainable design and construction approaches to the health of humanized and the planet to promote the values and achievements of increased use of sustainable designs;

Promote recertification by industry, scientific, and governmental entities to provide the design and construction industry with full life cycle assessment data for all products and assemblies used in the construction of the built environment at every scale in order to facilitate decisions making and communicate benefits to all;

Promote the AIA’s building performance design targets to local. American Institute of Architects Sustainable Architectural Practice Position Statement state, and national government;

Communicate possible beneficial economic values of environmentally responsible design to both public and private sector clients; and

Assume a global role as advocates for sustainable design by sharing knowledge and actively promoting sustainable practice throughout the world.
The Society of Graphic Designers of Canada (GDC) has created a working definition of sustainable communication design, supported by a set of principles and values, to guide its membership. It was unanimously endorsed in 2009 at the GDC’s annual general meeting in Winnipeg, Canada.

**Definition**
Sustainable communication design is the application of sustainability principles to communication design practice. Practitioners consider the full life cycle of products and services, and commit to strategies, processes and materials that value environmental, cultural, social and economic responsibility. Principle tenets and values:

**Encourage the evolution of the GDC and the graphic design practice by:**
- acknowledging that we are part of an interdependent world;
- accepting responsibility for the consequences our actions have on our natural environment;
- developing and building sustainable strategies and practices;
- participating with the international design community in developing global best practices;
- working to ensure products and services that are re-usable and/or provide long term value;
- and by purchasing recycled, local and non-toxic materials whenever possible.

**Demonstrate our commitment to improve the natural environment by:**
- sharing these principles through our various network;
- collaborating with other design organizations worldwide to promote and develop best practices for sustainable communications design;
- integrating environmental criteria into all design processes and organisational decision making;
- employing accountable and transparent processes and procedures;
- reviewing our environmental impacts regularly and continually working to reduce them;
- adopting practices that use materials in continuous cycles;
- seeking success who use sustainable practices;
- acting as community and industry advocates for environmentally responsible design practices;
- and by developing and providing products and services that improve the quality of life of all beings and support the health and well-being of the planet.

**Raise and foster awareness of sustainable communication design practice by:**
- promoting the intrinsic and greater value of sustainable communication design;
- encouraging clients to integrate sustainable principles into their communication projects;
- providing education and information resources to our members and the community at large to inform environmentally responsible design decisions;
- and by championing sustainable communication solutions for our communities.
We should look at nature as a model, mentor, and measure. “Biomimicry (from bios, meaning life, and mimesis, meaning to imitate) is a new science that studies nature’s best ideas and then imitates these designs and processes to solve human problems.”

Biomimicry
Brian Dougherty and the Celery Design Collaborative initially came up with the Sustainability Scorecard to help their designers evaluate materials and processes. The system, which is also used with clients, is based on the product packaging scorecard that Michael Brown developed for the suppliers of Norm Thompson Outfitters in 2002. It looks at three factors:

1. S: Source
2. E: Energy Impacts
3. D: Donate

Options are ranked in three categories:

- Green products are made from sustainably harvested, recyclable, no-toxic materials, with renewable energy, and are fully recyclable or compostable.
- Orange products are made from conventional renewable resources, with non-renewable energy (but with low embodied energy), and are compatible with incineration.
- Red products are made from non-renewable resources and materials which have severe toxic impacts, with non-renewable energy. They have high embodied energy and go to landfill.

This unique tool provides a framework for making smart decisions about a wide range of materials and manufacturing techniques. It helps designers visualize multiple competing factors and filter through the overly-simplistic claims that manufacturers often make.