

*Creating Communities of Change:
What We Learned in the Codes Forest*



West Coast Green Conference
September 20, 2007 - San Francisco, California

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Development Center for Appropriate Technology

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I think we have a small window of opportunity to save ourselves as a species.

I believe that window is the size and shape of the human heart...

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I think we have a small window of opportunity to save ourselves as a species.
And I believe that that window is the size and shape of the human heart.



Most of the systems we have created are far beneath the dignity and magnificence of the human species.

These systems denature us.

They override our fundamental nature as a caring, creative, nurturing species.

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We have created amazingly clever human systems that have enabled us to seemingly escape the limitations of the finite world of resources and space and time that have been with us from the beginning of human presence on the Earth. But most of those systems that so powerfully operate today are far beneath the dignity and magnificence of our species. They are constantly denaturing us - taking us away from and overriding our true nature as caring, creative, compassionate, nurturing beings. They trick us into thinking that they represent who we are and how we must behave.



In order to enable our survival we have to evolve as a species.

This will be the first time in history that evolution takes place as a conscious act.

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Our survival as a species depends on our ability to make an evolutionary leap - to consciously evolve as a species - to choose to change. To choose to return to our true nature. To reintegrate ourselves into the natural world - to re-member ourselves, to understand ourselves as members of the community of life.



For a dozen years I've been working towards an intention: that if we are to deal responsibly with the risks associated with building and development, we need to be able to see those risks...fully, clearly, and in context...

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For the past twelve years I've been working to understand what our real situation is on this little planet and to understand how we got here and what must change if humans are going to be able to survive and hopefully thrive. More important I've held an intention to find ways to reveal our true circumstances and to convey the reality that we have responsibilities to ourselves and each other and to future generations that we have been neglecting and ignoring. Because I've chosen to focus my work in the realm of building and development, it has become clear that it's crucial that we develop the ability to see and respond to the whole spectrum of risks related to the built environment - especially the relationships between natural and human systems in the context of risk and responsibility.

Finding the Trailhead...

Exactly ten years ago this Saturday, I got up in front of about a thousand building officials in Phoenix, Arizona, knowing that I only had ten minutes to give the 20 minute presentation I had prepared...



On September 22nd 1997, I was to give a talk on a plenary panel at the annual business meeting of the International Code Council (ICC) - the organization representing the building officials for the western half of the U.S. Bob Fowler, the man who led the effort to consolidate the three regional building code organizations and their codes into a single, national organization and set of codes, the International Code Council and the I-Codes, had invited me to talk about our fairly new program, Building Sustainability into the Codes. We were to each have 20 minutes for our presentation to an audience of perhaps a thousand building officials. I was intimidated by the size of the audience and who they were, so I'd prepared and rehearsed my twenty minute talk. As fate would have it, the session before ours ran halfway into our time and as they finished up, Bob informed the panelists that we'd only have ten minutes each. He said he hoped that would not be a problem and reminded me that I was to go first. I had the terrifying realization that I didn't have time to turn a 20 minute talk into a ten minute talk and that I was just going to have to wing it. We went up and sat down as Bob introduced all the panelists and then introduced me and sat down. I got up and just launched into my talk. A short way in I remember thinking that it felt like the best talk I had ever given. It was just flowing. And then as I was finishing up a point, I realized that I had used my 10 minutes and needed to wrap up. At the same time, I realized that the ending that I had was based on the other 10 minutes of material that I hadn't talked about and didn't have time to talk about. As I finished my point and tried to figure out what to say next, I heard myself talking. I remember thinking that I had better pay attention to this. What I said was something I had never thought before so we all got to hear it for the first time at the same time - even though it came out of my mouth.

Finding the Trailhead...

Exactly ten years ago this Saturday, I got up in front of about a thousand building officials in Phoenix, Arizona, knowing that I only had ten minutes to give the 20 minute presentation I had prepared...



What I said was this:

"I want to ask you a question. What goes through your mind when someone comes into your jurisdiction wanting to do something crazy like build a house out of bales of straw, or use the dirt, the earth, for adobe or rammed earth, or cob - something you've never even heard of? Or maybe they want to use bamboo as a structural material. Or perhaps they want to harvest water off the roof and drink it, or put in a greywater system, or use composting toilets. Or maybe they want to be off the electrical grid and have photovoltaic panels up on the roof and batteries. Or maybe, they're worried about electro-magnetic fields and don't want any electrical outlets in their bedrooms.

What do you think when people come in asking for permission to do these things? My guess is that your first thought is 'These people need to be protected from themselves.' And your next thought is 'Not in my jurisdiction!' As the laughter died down, I continued, "I want you to think about what is really happening because it is incredibly important. The vast majority of people who come in seeking to do these things have made a crucial discovery. They have realized that their lifestyle choices have consequences, many if not most of which are negative. Not negative for them, though. Negative for their children and grandchildren, and my children, and your children. These people are trying to take responsibility for the consequences of their choices...Is there anyone in this room who thinks that's a bad thing? I don't think so. So what is your job as a building official? Is it to keep those people from pursuing that goal of taking responsibility for what they do? Or is it to help them find the way to do it well and safely?" And I said to myself, "Shut up and sit down!" I thanked them and sat down to great applause. I thought to myself, "That was really good" and I wrote it down because I didn't want to forget it. Then I started thinking about what had just happened.

Finding the Trailhead...

What I learned that day:

the power of an authentic heart-to-heart message

the importance of knowing what the people you want to influence think and care about

that asking the right questions is more important than having the right answers

that I could speak the truth about what motivated me deeply and be heard

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I realized that in the last two minutes of a ten minute talk, I had said something that had cut right through the resistance to these ideas in a room full of mostly conservative people. As I thought about it, I realized that the power came from a few sources. First, it was an absolutely authentic heart to heart message about what we all care about - what we are trying to protect, why we have codes. Then I realized that I had connected also because I knew what they cared about and how they thought about it. But I also realized that I had just asked them a bunch of questions. I hadn't told them anything. I had just spoken from the heart about what really mattered to me and I trusted that would also care and that they could understand it. And I acknowledged the importance of their work and invited them to a higher place from which to do it.

Finding the Trailhead...

What I learned that day:

I got my first glimpse into the possibility that I was actually working with a "caring community."

And I saw that I wanted everything that they wanted...and more...because the last thing I wanted was anyone building unsafe buildings...
But I wanted a safe planet to build them on.

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I have called that talk in Phoenix, "Finding the Trailhead into the codes work," because it was the first time that I really got at a cellular level that these were people who cared about safeguarding the public. That they were a caring community. And I saw that I wanted what they wanted and more, not less, because the last thing I want is people building unsafe buildings. But I had a much bigger field of view and a broader definition of the categories of risk and responsibility - I wanted a safe planet on which to build those buildings as well...

Finding the Trailhead...

Phoenix was a breakthrough for me and the work!
It was when we started (unofficially) doing what we
call "Heart Work with Code Officials"

It was also just the beginning of a long process.

So we decided to create a program which we
called "Building Sustainability into the Codes."

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I started thinking of the work, unofficially, as doing heart work with code officials...connecting them to both the larger and the more personal reasons that we have and enforce codes. It led to the creation of our program Building Sustainability into the Codes.

Finding the Trailhead...

Along the way we learned a lot of lessons...
like you have to start with where people are and
you can only take them as far as they are willing
and able to go.

Pushing beyond that may be counterproductive.

But if you leave them alone for a while, you may be
able to come back and take them much farther the
next time.

That led us to realize that this work was going to
have to be done in phases over time.

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We learned a lot of lessons along the way. We've never stopped learning them. Some came from hard experience...like that you have to start with people where they are, not where you wish they were or hope they are. And you can only take them as far as they are capable of and willing to go. Whatever you do beyond that point with them will often be wasted at best and counterproductive at worst. But if you bring them as far as you can and let them go, you can usually come back later and take them a long ways. Thinking about this and the nature of change made us envision this a process that would unfold in phases.

DCAT's 3 Phase Approach

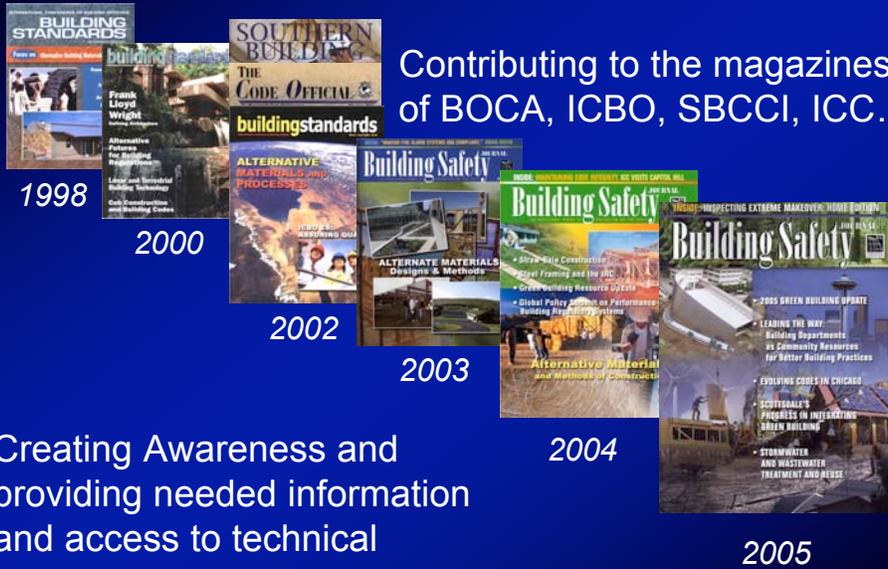
1. Awareness building about the need for change.
2. Capacity building to support and enable the change - through education, training, information resources, and involvement of all stakeholders in the code development process.
3. Transfer of leadership for the ongoing work to the codes community and others engaged in creating a sustainable built environment.

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We saw three basic phases, though we knew the boundaries would be blurry and have many overlaps. The first phase is awareness building about the need for change. People rarely change when they can't see a reason to. The second phase is capacity building in support of the change - providing the information and educational and technical resources as well as developing resources for and involving all the related stakeholders in the process. And the third phase is the natural transfer of leadership to those you are working to influence as they internalize the ideas and it becomes part of how they think and make decisions and take on the role of moving things forward. We said for years that if you do the first two phases well, the third just happens.

And We Went to Work...

Contributing to the magazines of BOCA, ICBO, SBCCI, ICC...



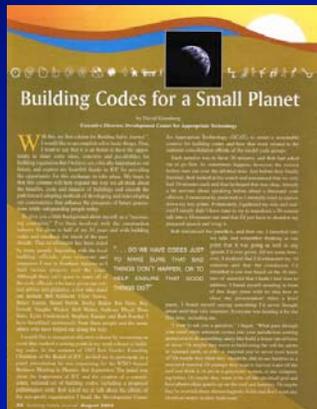
Creating Awareness and providing needed information and access to technical resources...

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So, we had our work cut out for us and we started doing it. We were invited to produce a feature issue of ICBO's magazine Building Standards in 1998 and another in 2000 and then in 2002 as well as other articles in the magazines of the other code groups. This was a way to provide good technical information to the membership and introduce a lot of ideas about why this mattered and how it related to public health, safety and welfare.

1st and 2nd Phases...

In 2002, ICBO gave us a regular column in *Building Standards* - "Building Codes for a Small Planet"
In 2003 it moved to ICC's *Building Safety Journal*.



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In late 2001, ICBO leaders asked us if we'd like to write a regular column in *Building Standards*. Beginning in January 2002 my column, "Building Codes for a Small Planet" began appearing in each issue. This was a huge breakthrough. We had entered the codes arena as outside environmental and social justice advocates and had built the kind of trust and relationships that allowed us to be invited inside and given a platform, as change agents, to educate the members about issues related to sustainability and green building. After ICBO and the two other regional code groups, BOCA and SBCCI consolidated into the International Code Council, the column moved into ICC's *Building Safety Journal*.

1st and 2nd Phases...



We produced a 50 minute video *Building Codes for a Small Planet* to tell this story more widely.

We upgraded the DCAT website www.dcat.net



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We also developed a video called Building Codes for a Small Planet to educate code officials and others about these issues. And we upgraded our website.

1st, 2nd, and Approaching the 3rd Phase...



We taught courses at state and regional code training and education institutes in Colorado, Texas, Kansas, Oregon, Nevada, California, Washington, Arizona and Minnesota, and at ICBO and ICC annual conferences.

What follows are examples of our teaching methods and tools...

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We started teaching courses at regional and national building code educational institutes and trainings all over the country. We taught some about why these things matter, some about various alternative technologies and materials and designs, and about how to think differently about risk and responsibility. We evolved ways of talking about these issues that helped bring us closer to common goals and understanding.

Life After Cheap Energy & a Stable Climate

We would provide a lot of information about energy security issues, climate change, ecological footprint, population, impacts of various materials and processes.

It's not hard any more to make the case that we have a constellation of extremely difficult challenges facing us and the built environment is a significant part of the problem.

Then we'd talk about how we think about these things...

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We created the missing context within which code officials could begin to see the whole risk profile of building and development. Today it is much easier to talk about things. Nearly everyone has heard about climate change and peak oil, species extinctions, and other environmental and social issues and their linkage to building and development. Eight or ten years ago this was not so easy to do.

Life After Cheap Energy & a Stable Climate

We can't rely on our past assumptions about progress, technology, risk, standard of living, national security, global security, trade, or economics. It is all changing.

Today's energy and climate realities are stunning and stark. We have crucial choices to make and not much time to make them. We have what we need to find a safer path forward but to choose it, we have to ***change our minds*** and ***then change our behaviors...***

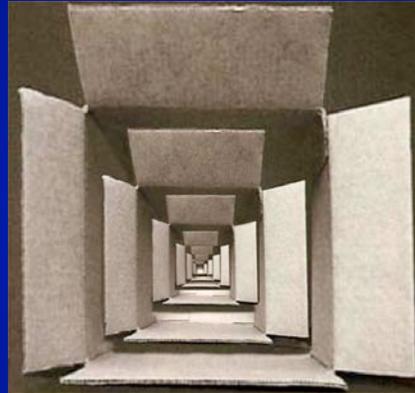
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But we found ways and we're still finding ways to effectively bridge the divide between relying on what we understood to be true in the past and learning to see what was changing, what changes were being brought about by our own practices and habits and actions. We found ways to talk about our habits of thinking as well.

Get Out of the Box

We often hear that we need to think "outside the box" to deal with our problems today.

But it's a process -
expand your field of view,
get out of the box you're in
...into the next bigger box.



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Significant changes are happening and are going to be required in virtually every human system as the realities of climate and energy and other resources, and environment become apparent to everyone. People talk about the need to think outside the box - especially with all the daunting challenges we're facing today. My experience is that it is really an infinite series of boxes. We expand our thinking and understanding and climb into the next bigger box. No one has anything remotely like the whole picture of reality or truth, and that's okay. I love this image because it reminds me that I and everyone else always has a lot to learn - that our world view is always inherently both incomplete and inaccurate. Our job is to make the largest and most accurate map of reality that we can in our time here. We have to be willing to redraw your map constantly...

See the Details AND the Big Picture...

To get out of boxes requires knowing if you're working in the details or the big picture, in the past, present or future, and constantly shifting your focus back and forth.

That helps keep things in perspective and proportion, enabling us to see the *things* as well as the *relationships* between them.



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To do that well, we also need to know whether we're working in the details or the big picture or some intermediate level, in the past, the present, the future, always trying to understand the context of your focus. Focus is an act of exclusion - you focus on something and by definition, you exclude everything else. If you don't know that, if you don't pay attention to that you get lost in the details or you lose sight of them. We all need to develop the habit of constantly shifting our focus and looking for the patterns and the spaces between things and their relationships. This is how we learn to keep things in perspective and proportion.

The Purpose of Building Codes

International Building Code (USA) - 2000 edition

101.3 ***The purpose of this code is to*** establish the minimum requirements to ***safeguard the public health, safety and general welfare*** through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property ***from*** fire and other ***hazards attributed to the built environment.***

Big Picture in White - Details in Blue

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Bringing this back to building codes - here is how I view the details and the big picture in codes. This is the purpose statement from the International Building Code (USA). The statement I've highlighted in white is the Big Picture. The rest is Detail. The purpose is to safeguard the public from hazards attributable to the built environment. It doesn't limit responsibility to only hazards that occur at the building site or to only hazards during the life of the building because the hazards attributable to the built environment begin far from the building site and often end far from it as well and they begin long before the building exists and extend far into the future.

What's Protected and What's at Risk?



Modern building codes enable us to design and build structures that are safe for their occupants, making it seem that we've eliminated or greatly reduced the risks associated with buildings.

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Our modern building codes are extraordinarily good at enabling us to design and build buildings that rarely burn down, fall down, trap people in emergencies, expose them to raw sewage, electrocute them, let them fall from high places, suffocate them too quickly, and so forth. Thus we think we've eliminated or greatly reduced the risks associated with buildings.

What's Protected and What's at Risk?

We've just moved those risks in space and time:

- away from the building site, and
- into the future.



What we've actually done is move those risks in space and time. We've moved them away from the building site out into all the natural systems on the planet - our life support systems, and from the present to our children and grandchildren and all the future generations of all the other species on whose welfare our welfare also depends.

Big Problems Hidden in Plain View

Looking at buildings through codes is like looking through a microscope. The individual, building-related risks fill the field of view.

But, it's like dealing with risk with tweezers, while creating many orders of magnitude greater, generalized risk for everyone, including all future generations.



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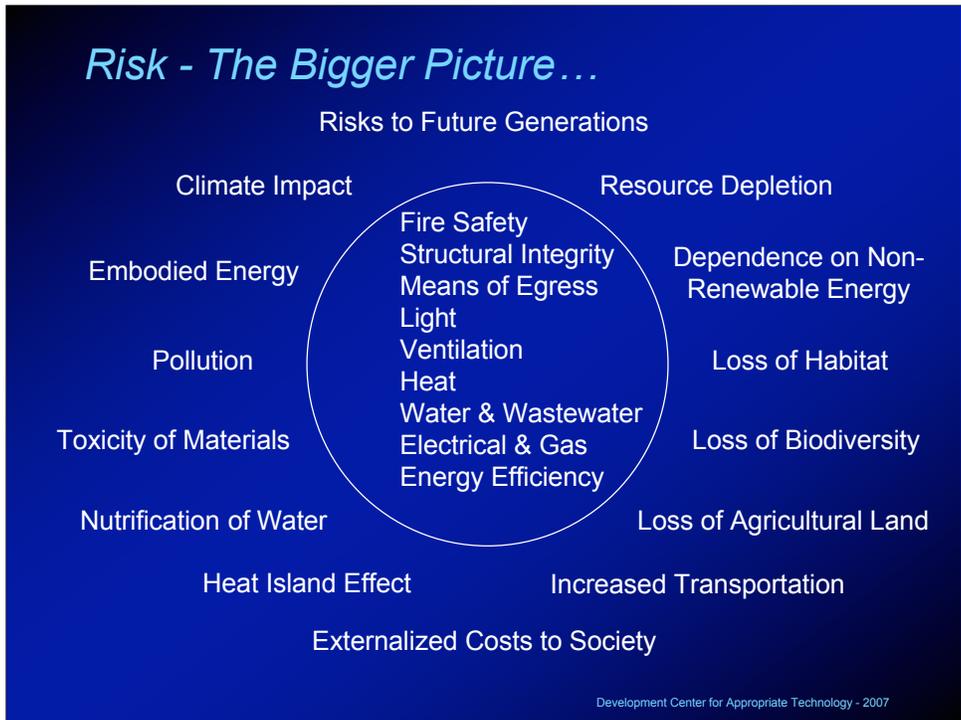
It's like we're looking at risk related to buildings through a microscope. We can see all the important risks to people in and around buildings. But important as they are, these risks exist at the smallest and most specific level and they completely fill our field of view. They're very important because they are risks to real people. But it's like we're dealing with risk with tweezers while at the same time, the actions we're taking to minimize risk at this level are creating many orders of magnitude greater generalized and distributed risk to billions of people that can't be seen through that lens.

Risk - Through the Microscope of Codes...



Fire Safety
Structural Integrity
Means of Egress
Light
Ventilation
Heat
Water & Wastewater
Electrical & Gas
Energy Efficiency

These are the categories of risk and responsibility as laid out in the codes. This is the view through that microscope...



But if you take your away from that lens, you see a whole galaxy of other larger risks to all of us which are also attributable to the built environment. Meaning that they are also central to the responsibility of safeguarding public heath, safety and welfare. They are not external - they are central. And it is not a question of one set of risks or the other. We have to learn how to balance and address both sets of risks.

Buildings are Complex Systems of Systems

English does not contain a suitable word for "system of problems." Therefore I have had to coin one. I choose to call such a system a "mess." The solution to a mess can seldom be obtained by independently solving each of the problems of which it is composed.

- Russell L. Ackoff

Or, more simply put...

Optimizing components in isolation tends to pessimize the whole system.

- Paul Hawken, Amory & L. Hunter Lovins

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These are two of my favorite quotes - a long and short version of the same essential idea - that we are dealing with systems - always. It's all connected and we can't solve any problems independently.

How to Not Pessimize the System?

Building codes typically optimize components of a building in isolation, often pessimizing both the building and the systems to which it's connected.

To truly optimize buildings requires considering the whole system of systems. All technologies need to be viewed this way, to include their whole risk/benefit profile.

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But the codes treat buildings as assemblies of materials, parts, equipment, - components that are not viewed in a comprehensive, systemic way. And so they have tended to pessimize both the buildings and the human and natural systems in which buildings actually exist. To get beyond this we need to see and think differently about design and buildings and technologies.

What Buildings Should and Shouldn't Do...

Building codes could be a set of principles for what buildings should and shouldn't do...

A good first principle would be a corollary of the Hippocratic Oath; buildings should first do no harm.

To consider the harm a building might do requires looking at the impacts from its entire lifecycle...

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I've long thought that we should think of the codes as a set of principles about what buildings should and shouldn't do. A good first principle might be a corollary of the Hippocratic Oath - that a building should first do no harm. In order to consider the harm a building might do, however, we'd need to consider the entire lifecycle of the building...

Acquisition of Resources through Demolition & Beyond



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This starts with the acquisition of resources and their transportation and processing and extends to the impacts of the building on the land and the infrastructure it requires. We'd need to consider the impacts of the construction process, the wastes generated, toxic chemicals used, the flow of resources through the building over its lifetime for repair, maintenance and refurbishing and for the services we demand of our buildings. And then we'd need to think of the impacts at the end of the life of the building and out into the future, and whether the materials are reusable, recyclable, toxic, or will just end up in the landfill.

Doing No Harm...?



This is my grandson, Joe. Does what we're doing insure that our buildings and developments do no harm to him? Or to his grandchildren?

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Building codes have the intention that buildings do no harm, but only certain kinds of harm, and almost exclusively, harm to their occupants. This has only recently come to include things such as indoor air quality and toxicity of materials. So we have a system that affects everything from the acquisition of resources through to the impacts of buildings extending well beyond their demolition, but focused on a very narrow set of concerns. This is my grandson, Joe. He is a big part of my inspiration for the work I do. I can't think about these issues without relating them to Joe and to his grandchildren or the billions of other children and grandchildren the world over. These are not abstract issues. They are real and personal for me as they should be for all of us. They are about our responsibility to recognize risk and dealing with it appropriately.

Codes are a Gate, Officials the Gatekeepers

Crucial changes are needed in all human systems and for the built environment, building codes are the gate to those changes and code officials are the gatekeepers.

The changes are likely to be very different from what we've grown accustomed to in this extended period of stable climate and abundant, cheap energy. The solutions are going to have to be more community-based and regional as we lose the ability to afford the current trends in globalization.

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We are going to see enormous changes in both natural and human systems as a result of energy and climate realities. For the built environment, codes are the gate to those changes and code officials are the gatekeepers. This is a crucial understanding of the role that this sector plays in enabling or undermining our ability to adapt to changing realities.

Codes are Fear-Based Responses

Codes are fear-based - the response to disasters and failures. Yet this crucial function leads to the regulatory mindset: a focus on preventing bad things from happening.

Because they're focused on minimizing risk most regulations (including codes) tend to be almost as effective at keeping the best things from happening as the worst.

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Regulations are almost always responses to failures or catastrophes - thus they are fear-based responses intended to keep bad things from happening - usually from happening again. So they are focused on minimizing or eliminating risk - all kinds of risk including both real and perceived risks, technical and legal risk, and so forth. This is the same mindset that many environmentalists operate from - trying to keep bad things from happening - we're just looking at different parts of the system...

Unfortunately, this mindset, which I call the regulatory mindset, tends to be nearly as effective at keeping the best things from happening as the worst things because innovation or things that are unfamiliar represent risk as well and so are often resisted.

There Have Been Real Leaders ...



So, we showcased places like Seattle, Aspen, Chicago, Scottsdale, and others where building departments are providing real leadership, switching from just keeping bad things from happening to being vital community resources enabling the best things to happen.

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What we have been encouraging and are now seeing in more and more jurisdictions around the country are people who have begun to see the building department and the building officials within it as real community resources to enable the best things from happening, not just prevent the worst. And where that has happened, extraordinary things begin happening both in the community and in the building department. Take a good look at some of these communities and what they have and are accomplishing.

1st, 2nd, and Approaching the 3rd Phase...

We worked with many other people and organizations to bring useful information to the codes community and to help those organizations deal with code-related issues.

When I was on the USGBC Board of Directors I initiated the creation of the USGBC Codes Committee, which I still chair. For more information contact: codes@committees.usgbc.org or visit the USGBC website: www.usgbc.org

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Our work at DCAT expanded to working with many other organizations. Among the most important is the U.S. Green Building Council (USGBC). I was on the Board of Directors of USGBC for five years from 2000 through 2005. While there I initiated the formation of the USGBC Codes Committee which I chair. We are now working directly with ICC on a number of initiatives and you can learn more on the USGBC website.

And Now Things Are Really Taking Off



ICC-USGBC MOU May 2007

Green Codes Summit
July 11-12, 2007
The American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006

Designed to afford participants the opportunity to gain a greater understanding of the options and issues associated with "green" regulations and to give them insight into methods to improve their efforts back home, the AIA hopes you will be a part of this exciting endeavor.

You are invited to be a principle participant in the summit and will be asked to bring to the summit the resource materials that your community has gathered and any draft legislation or other approach you have been working on. Our hope is that by sharing with others, you and the AIA can derive a better solution that we can all share.

The Green Codes Summit will begin with dinner on the evening of Wednesday, July 11, and continue on Thursday, July 12, from 8:30 a.m. to 3:30 p.m., in Washington, DC.

ICC Green Building Home Page





August 2007

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In the past year all sorts of things have started happening within and around ICC.

Acceleration of Phase 3

In 2006 the ICC Board of Directors adopted a green building and sustainable development policy and formed an internal "Green Team."

In May ICC and USGBC signed an agreement to:

Develop the Green Building Education Track for the ICC 2007 annual conference in Reno, and

Develop a Guide to Sustainability and Green Building for Code Officials

A link to the MOU can be found in the May ICC eNews:

www.iccsafe.org/news/ePeriodicals/eNews

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The ICC Board adopted a policy on green building and sustainable development. ICC created an internal green team, signed an agreement with USGBC, partnered with the AIA, NAHB and others.

Acceleration of Phase 3



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ICC Daily News

- New ICC collector's pins at [Annual Conference](#).
- [Fireside Chat](#) offers International flavor.
- Board of Directors [Candidates](#) announced.
- [Comment](#) on member benefits, services.
- APA, ICC publish [residential lateral bracing guide](#).
- Coalition promotes [code official public safety role](#).
- Most at-risk communities have no [wildfire plans](#).
- ICC Board Modifies [Call for Sprinkler Commitment](#).
- 2006 IBC meets [FHA accessibility requirements](#).
- [California Codes](#) available now!
- [IT Symposium](#)—Solutions for Code Officials.
- [New AF&PA info](#) on finger-jointed lumber.
- AIA seeks [health care commitments](#).
- [ICC-ES updates](#) efforts to I-Codes.
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Link to ICC Green Building Homepage

from the ICC Homepage: www.iccsafe.org

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The ICC developed a green building webpage linked from the ICC homepage.

www.iccsafe.org/news/green/index.html

ICC Online | Green Building

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Green Building

Green Building

Take the ICC Green Building Survey! Attention ICC Governmental Members, your input is important in shaping ICC policy and providing future direction on matters relating to the relationship of "green building" to the codes produced and derivative training, technical and evaluation services offered by the International Code Council. Please read the ICC Position/Policy Statement and ICC Green Building White Paper below, then [click here](#) to take the survey.

ICC Green Building Policy Position Statement. The International Code Council Board of Directors has issued a policy position on Green Building/Sustainable Communities to emphasize its commitment to social responsibility and expand the boundaries of public safety. [Click here](#) for more information.

The 1-Codes and Green Building/ICC Green Building White Paper. The purpose of this paper is to give an overview of the current green building climate, track the efforts of various organizations in this area and provide a general background or primer for ICC members and others interested in green building and the relationship of green building to the codes produced by the International Code Council. [Click here](#) for entire paper.

Initiating a Green Building Program. This file contains links to some of the more popular resources which may be beneficial to those interested in forming a green building program in their jurisdiction (some links may require that you cut and paste the address into your browser), beginning with organizations which produce green building evaluation systems and/or standards. [Click here](#) for complete file.

Green Building News, Links and Articles of Interest

Link	What is green building?
Link	Why build green?
Link	United States Green Building Council

Contact ICC
1-888-ICC-SAFE (422-7233)

- [Board of Directors](#)
- [Code Offices](#)

NEW!
Download your INTERNATIONAL LEGACY and STATE CODES online
Available now at

Green building information can be found on the website as well as in many ICC periodicals.

ICC Co-Sponsored the Green Codes Summit

Green Codes Summit

July 11-12, 2007

**The American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006**

Designed to afford participants the opportunity to gain a greater understanding of the options and issues associated with "green" regulations and to give them insight into methods to improve their efforts back home, the AIA hopes you will be a part of this exciting endeavor.

You are invited to be a principle participant in the summit and will be asked to bring to the summit the resource materials that your community has gathered and any draft legislation or other approach you have been working on. Our hope is that by sharing with others, you and the AIA can derive a better solution that we can all share.

The Green Codes Summit will begin with dinner on the evening of Wednesday, July 11, and continue on Thursday, July 12, from 8:30 a.m. to 3:30 p.m., in Washington, DC.

Development Center for Appropriate Technology - 2007

The ICC partnered with the AIA to co-sponsor a Green Codes Summit in July in Washington, DC. I was invited to give the opening presentation at that summit and ICC leadership was represented through the whole day.

ICC Newsletter - September 19, 2007

ICC eNews | September 2007

From: International Code Council
To: straweha@aol.com
Date: Wed, 19 Sep 2007 10:06 pm

Benefit from the Code Council in [attending](#) [sessions](#) at the Arizona Building Officials Association's Fall Education Institute from October 29-November 3 in Tucson, Arizona.

October 29
2006 IBC Fundamentals — Nonstructural

October 30
2006 IBC Fundamentals — Structural

NYS Codes Available Now



The [New York State Codes](#) are based on the 2003 I-Codes. The NYS Codes are a great step towards building safer communities in New York State. Other products and services for New York are also available online.

Get SMART on Code Checks



Want to know how building information models, model code checking software and SMARTcodes are changing the design and approval process? Code Council staff will be on hand May 15-17 at the upcoming Institute of Architecture 2008 National Convention and Design Exposition in Boston to present a 90-minute seminar on SMARTcodes entitled, "Integrating the Permit Process, Auto Code Checking," and answer your questions.

18,999 Members Strong



The Code Council's premier [Bulletin Board](#) hit the 10,000-member mark last month with the participation of 20 new members.

Developing Green Building Programs or Ordinances

Written by code experts for code experts, ICC eNews offers this free article to help you in your everyday pursuit of code excellence.

With more jurisdictions adopting measures to encourage the implementation of green building features in new construction and the renovation of existing structures, it helps to know how to lay the groundwork, build support, establish guidelines and marshal the resources needed. [Have an idea on how to proceed](#) when developing a green building program or ordinance.

Green Scene

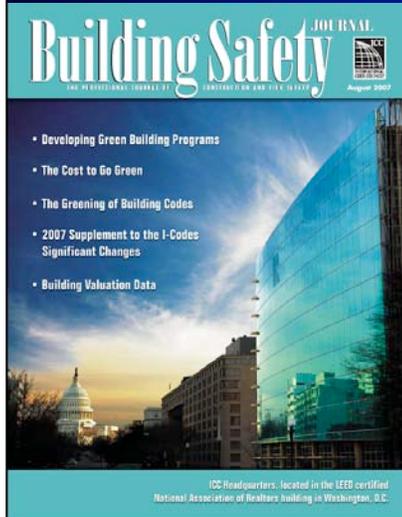
The following news links may take you outside ICC's website. ICC is not responsible for the content and online practices of non-ICC websites.

- [Green versus Green: Which Standard is "Greener"?](#)
- [AIA's Top-10 Green Projects for 2007](#)
- [Students Take on Concrete for Sustainable Design](#)
- [NAIOP Endorses Sustainable Real Estate Practices](#)
- [ASHRAE to Guide Green Health Care Facilities](#)
- [British Architects Institute Honors International Green Designers](#)
- [Green Still Doesn't Drive Building Cost](#)
- [LEED Silver in the Windy City](#)
- [Newarkites Create a Desert Oasis to Sustainability](#)
- [USGBC Announces Next Steps in LEED Evolution](#)
- [Home Depot Pushes out Green Labeling](#)
- [ASHRAE, Mexico Green Building Council Partner on Sustainability](#)
- [Green Certification Now Available for Minnesota Homes](#)

Development Center for Appropriate Technology - 2007

ICC's various publications are providing more and more good information about green building and issues of sustainability with each passing month.

Phase Three has Arrived!



The August 2007 issue of Building Safety Journal is a watershed issue as far as DCAT is concerned.

Not because it has a cover feature on green building - we've done those before...

This is *the first green building feature* that DCAT had no part in producing.

Development Center for Appropriate Technology - 2007

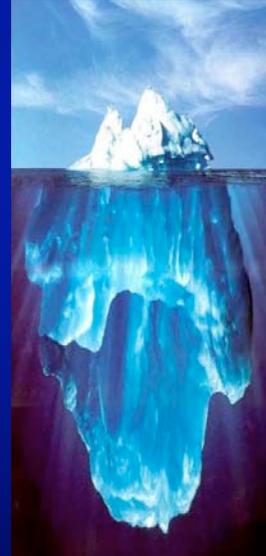
And with the August issue of Building Safety Journal, the third phase of DCAT's vision of change came to real fruition. This is the seventh feature on green building and sustainability in these magazines since the first one we put together for ICBO in 1998. But this one is different. DCAT had nothing to do with this producing this feature. ICC did it themselves and did it well.

Bigger Context: Just the tip of the Iceberg...

Green building, Smart Growth, Energy Star, LEED, etc. are all steps in the right direction, but they're really only first steps...

We rarely acknowledge the magnitude of what we're facing.

The good news is that we've finally overcome inertia of rest and things are moving... But we need to keep seeing the big picture...



Development Center for Appropriate Technology - 2007

These changes are all hugely encouraging. And they are also just first steps as we begin to address the realities we all face. It's crucially important that we've overcome inertia of rest. Things are moving and moving in the right direction. And they're accelerating. But we have a long way to go...

The Timing is Right for the Next Leap

So, the code officials are coming on board just in time... we're going to have to greatly accelerate this work and intensify its goals and targets as we begin to deal with the realities of peak oil and climate change and more. Great progress...but we're nowhere near *there* yet...



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So the code officials are coming on board at a crucial point in time. We have great work to do together as we begin to envision a different future.

The Dance - Between Love and Fear

We have to learn to see and feel and not deny what is happening to the things we love... not deny our fear, or anger or grief. Yet we can't be incapacitated by those feelings. They need to be the source of our motivation and inspiration to move beyond fear into changing ourselves and what we are capable of doing.

That is important work...

Development Center for Appropriate Technology - 2007

We also need to work at recognizing and not denying the potential that facing the things that are happening in the world can be frightening, depressing, and even incapacitating if we don't have ways of dealing effectively with our fear, anger, grief and other emotions that tend to lead some people to deny that anything is happening or anything needs to change. We can learn to turn these things into the motivation and inspiration for the great work we now get to do. This is crucial work too.

The Dance - Between Love and Fear

We have to recognize that many of us in the environmental movement are also operating in a fear-based mode, trying to keep the worst things from happening. We need to find ways past that mindset.

We've been working on continually trying to visualize what we're trying to bring into existence instead of focusing on preventing what we don't want. But we need to remember what the limits of our knowledge are...

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Lots of us in the environmental movement are also operating in a fear-based mode. What we've found is that it is important to not deny what is happening, and to take actions that help prevent the worst things from coming to pass, but that is not nearly enough. What is needed is to focus on creating what we want, working to keep bringing into existence those things that bring joy and vitality and hope into our work and our lives. And we also need to acknowledge the limits of our understanding as well.

The Great Modern Myth

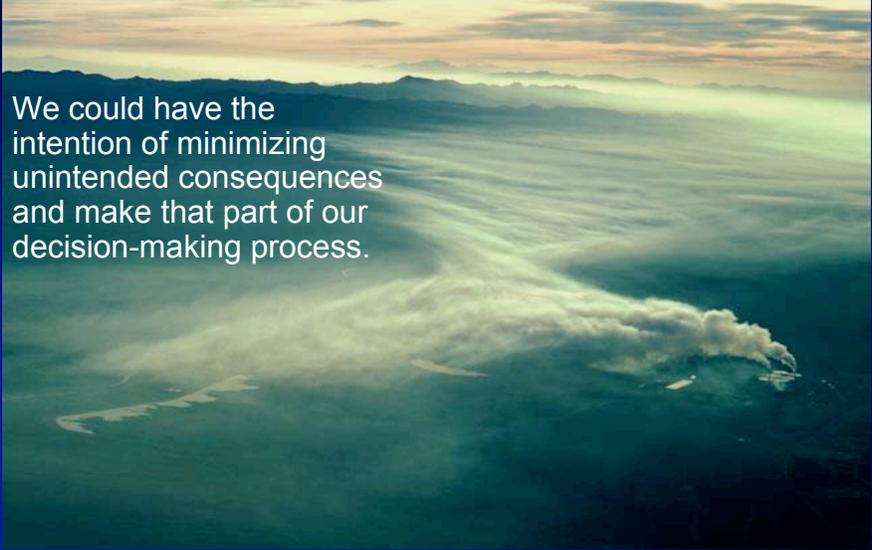
We need to recognize and address the great modern myth - that we know what we're doing and are in control. We don't and we're not...



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We need to address what I call the great modern myth, which is the hubris of thinking that we know what we're doing and we're in control. That there is someone somewhere who is keeping track of all this and keeping us safe. That is an illusion and we need to learn to see it as such and take responsibility for our choices and actions.

Addressing the Great Modern Myth



We could have the intention of minimizing unintended consequences and make that part of our decision-making process.

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When we realize that most of the consequences of much of what we do are unknown and unintended, we could begin to develop the intention of minimizing the unintended consequences, making that part of our decision-making processes.

Addressing the Great Modern Myth

Thinking deeply about our choices of materials and systems might lead us to develop a preference for doing things as locally as possible, as simply as possible, and doing as little as possible of those things that we know are harmful or about which our knowledge and understanding is limited.



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Thinking about the issues of how little we know about the consequences of what we do can guide us to develop preferences for simpler, more local, more natural materials and systems and a more precautionary approach to our choices.

A Place to Start

Appropriate technology - the lowest or simplest level of technology that can do the job well.

Appropriateness relates to where and for what purpose technology is used and the social, economic, and ecological context.

Truly appropriate technology doesn't make people or their communities dependent on systems over which they have no control. This means technologies that enhance the local capacity to meet local needs - in a lower energy world this is the foundation for security and sustainable communities.

Development Center for Appropriate Technology - 2007

The name of my organization is the Development Center for Appropriate Technology. Many people ask what makes technology appropriate? A standard definition of appropriate technology is that it is the simplest or lowest level of technology that you can use to do well what needs to be done. I contrast that with our cultural bias that tells us that higher technology is always better, that there is an obligation to always use the highest level of available technology one can afford, and that when new technology is introduced the old technology becomes obsolete and is no longer useful. The reason we care about the level of technology that is used is that higher levels of technology come with higher levels of unintended consequences and at some point the consequences are not merely unknown, they are unknowable, especially in the time frame in which we must make our choices.

Appropriate technology isn't necessarily low tech. It is the right level of technology for what must be done, based on the specific use and real needs, circumstances, and to the degree that they are knowable, the consequences flowing from its use. It can be high-tech or no-tech or anything in between.

The best definition of truly appropriate technology is that it is technology that doesn't make people or their communities dependent on systems over which they have no control. If we think about this seriously, it means technologies that enhance the local capacity to meet local needs - which is the true foundation for sustainability and for real security.

Relocalization

Doing things locally is important for many reasons, but first and foremost, the feedback loops are shorter and much higher quality. You're much more likely to run into the unintended consequences of your actions.

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There are lots of reasons to do things locally but one of the most important is that the feedback loops are much shorter and much higher quality when we do things where we are as opposed to hundreds or thousands of miles away where we will likely never run into the unintended consequences of what we're doing.

Relocalization

If *security* is a goal, strengthening regional and local self-sufficiency is an essential strategy for us and for everyone else, everywhere else.

Enhancing the local capacity of people and their communities to meet their own needs, also:

- shortens vulnerable supply lines
- creates more robust & resilient supply systems
- supports vital, durable local economies, and
- supports healthy cultural, political, and social structures

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And where security is important, there are few things more important than enhancing local and regional community self-sufficiency. This is actually the only rational strategy for long term security - helping everyone, everywhere strive for regional and local community self-sufficiency. This strategy is not against globalization, per se, it is about relocalization and it is about creating durable, healthy and robust economies, ecosystems and social systems.

Relocalization

When we don't have inexpensive, abundant energy to drag materials around the world, process them as much as we imagine we need to, and then drag them around some more, it will become crucial that we learn, once again, how to use well those resources that are available to us where we live...

The rules and the way we think about risk and benefit will have to change - to become more nuanced, more inclusive, and more responsive.

Development Center for Appropriate Technology - 2007

As energy becomes more expensive and less readily available, the redevelopment of local and appropriate solutions will become ever more important. And this will necessarily change the ways we think about risk and benefit. We will need to become more adept at dealing with change and complexity.

Some Tools and Resources

The relocalization movement is a key part of the shift toward sustainable development and true security. This includes energy, materials, food, economic development and more. Check out these websites for more information:

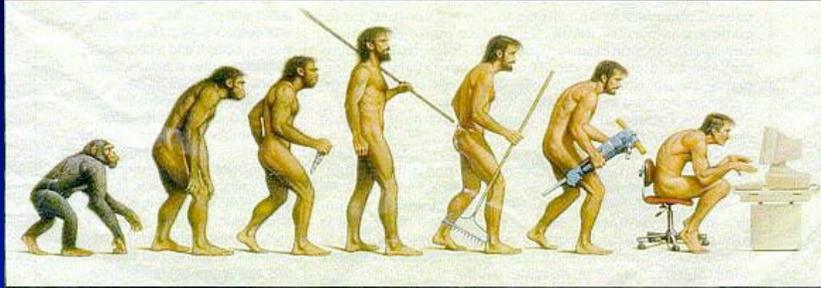
www.relocalize.net

www.postcarbon.org/informed/relocalization

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Here are some resources about the relocalization movement.

And We Keep Asking Questions...



Why do all our systems appear to be designed to make the world safe for technology and capital?

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We need to keep stepping back and looking at what we're doing, what it is producing and whether that is what we want.

Making the World Safe for Technology?

What if we understood that our task as human beings on this planet is to make the world safe for all life forever...



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And as we get clearer about what is needed for us to survive as a species, and to really thrive - all of us and all the other species in our larger family of life, we have the opportunity to choose a new course. To do so means we need to be asking new questions in regard to everything we're doing.

Some Questions We Should Be Asking

Does this choice or action:

enhance or undermine your capacity to meet your needs locally/regionally?

create benefit without making you dependent on systems over which you have little or no control?

transfer wealth out of the community?

embed you and others in your community or displace or compel people to become transient?

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Here are some of the questions that I've been thinking about...questions that we should ask about public policy decisions, business decisions, and our own personal decisions and actions.

Some Questions We Should Be Asking

Does this choice or action:

enhance or destroy equity - both the social and cultural equity related to fairness and justice, and the tangible physical/economic benefits of belonging to and being "invested in" a place-based community?

promote or undermine health - your health, the health of your family, your neighbors, your community, region, nation and the health of people and living systems anywhere in the world?

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These questions might be asked publicly as a regular part of the public process in all communities.

Some Questions We Should Be Asking

Does this choice or action:

increase or decrease the level of unintended consequences flowing from what you are doing?

increase or decrease your awareness, comprehension and ability to mitigate the unintended consequences of what you are doing?

bring people together or drive them apart?

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And if we were asking them out loud and having real community dialogue about them as we seek mutually beneficial answers and solutions, we would find ourselves in a very different process than what we're used to.

Some Questions We Should Be Asking

Does this choice or action:
cause offense, concern, or harm?
bring joy and/or satisfaction to you and to
everyone effected by it?

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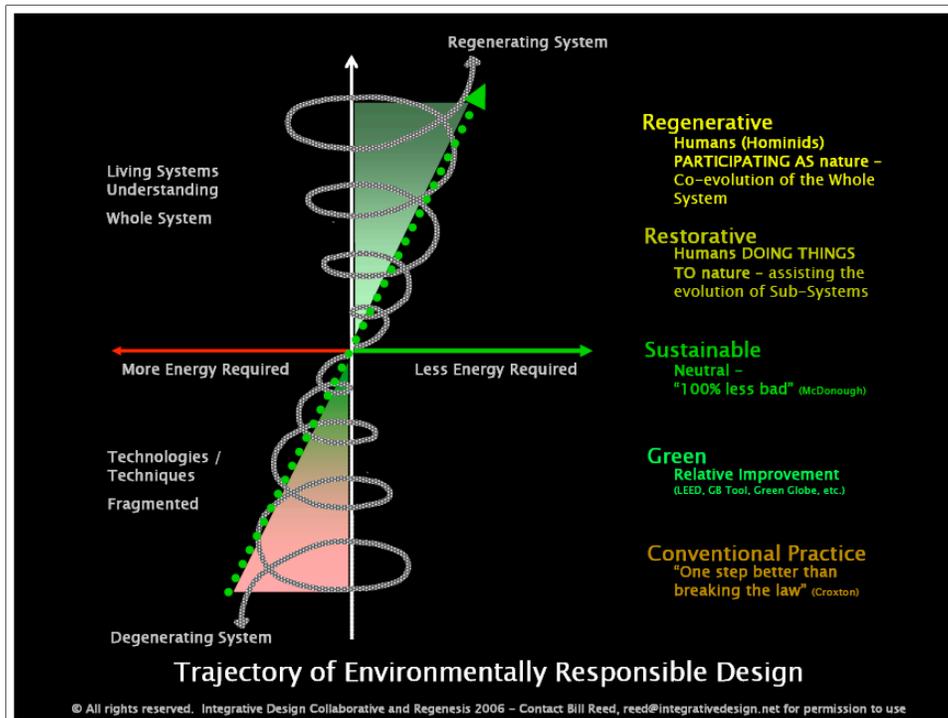
And ever since that talk in Phoenix ten years ago, I've been convinced that having the right questions is far more important than having the right answers.

We Get To Choose Now



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We now get to choose to take the next step. What an amazing time to be alive!



There are many people envisioning a very different way of thinking about building and development, looking deeply into the way nature and natural systems work and evolve. As we begin to shift our thinking and our understanding of place in the community of life, new opportunities emerge for fundamentally different ways of conceiving of and creating the things we need. And as we seek out these systems that fit us back into the co-evolutionary flow of life all kinds of possibilities emerge.

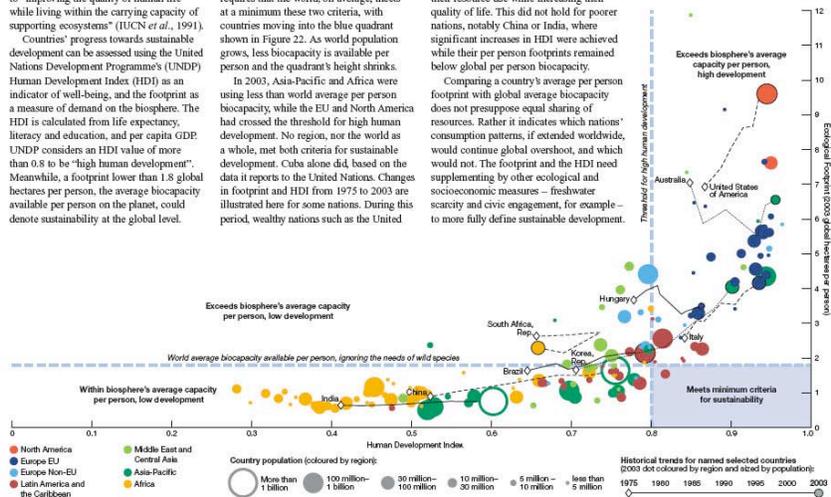
THE FOOTPRINT AND HUMAN DEVELOPMENT

Sustainable development is a commitment to "improving the quality of human life while living within the carrying capacity of supporting ecosystems" (IUCN *et al.*, 1991). Countries' progress towards sustainable development can be assessed using the United Nations Development Programme's (UNDP) Human Development Index (HDI) as an indicator of well-being, and the footprint as a measure of demand on the biosphere. The HDI is calculated from life expectancy, literacy and education, and per capita GDP. UNDP considers an HDI value of more than 0.8 to be "high human development". Meanwhile, a footprint lower than 1.8 global hectares per person, the average biocapacity available per person on the planet, could denote sustainability at the global level.

Successful sustainable development requires that the world, on average, meets at a minimum these two criteria, with countries moving into the blue quadrant shown in Figure 22. As world population grows, less biocapacity is available per person and the quadrant's height shrinks. In 2003, Asia-Pacific and Africa were using less than world average per person biocapacity, while the EU and North America had crossed the threshold for high human development. No region, nor the world as a whole, met both criteria for sustainable development. Cuba alone did, based on the data it reports to the United Nations. Changes in footprint and HDI from 1975 to 2003 are illustrated here for some nations. During this period, wealthy nations such as the United

States of America significantly increased their resource use while increasing their quality of life. This did not hold for poorer nations, notably China or India, where significant increases in HDI were achieved while their per person footprints remained below global per person biocapacity. Computing a country's average per person footprint with global average biocapacity does not presuppose equal sharing of resources. Rather it indicates which nations' consumption patterns, if extended worldwide, would continue global overshoot, and which would not. The footprint and the HDI need supplementing by other ecological and socioeconomic measures—freshwater scarcity and civic engagement, for example—to more fully define sustainable development.

Fig. 22: HUMAN DEVELOPMENT AND ECOLOGICAL FOOTPRINTS, 2003



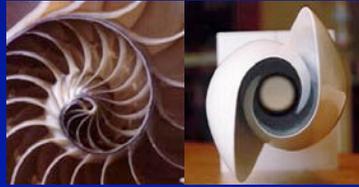
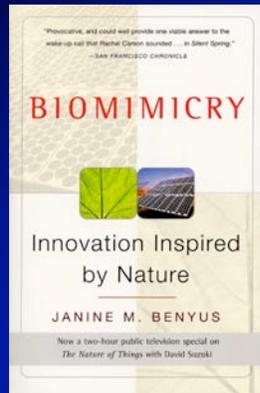
LIVING PLANET REPORT 2006 19

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The concept of ecological footprint is based on looking at how much productive land area it takes to support a certain activity or population. Taking the world's productive land area and dividing it by the world population reveals that we are now exceeding the earth's natural systems capacity to provide resources and absorb the wastes of our human activities on the planet. The latest development in ecofootprinting has been to combine ecofootprinting with the human development index in one chart. The vertical axis on this chart represents ecological footprint on a per capita basis. The horizontal dashed line in this chart represents the global average bio-capacity per person, ignoring the needs of wild species. The horizontal axis is the UN Human Development Index and various countries and regions of the world are mapped out on these two scales. The ideal - something that might be sustainable - is to be in the shaded box in the lower right corner, where the ecological footprint per capita is low and the Human Development Index (a measure of overall well-being) is high. As we can see, we are a long way from that ideal today but we can begin to visualize a world in which we are living in harmony with nature and natural systems and also living well. These are the kinds of things we will need to start measuring as carefully and assiduously as we now measure economic activity.

Reintegrating Ourselves Into Nature

www.biomimicry.net/



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There are new fields opening up such as biomimetics - the study of the way nature works, not to manipulate and exploit nature but to learn from nature and create human systems that work with the same principles and effectiveness and harmony.

How Do We Get Everyone Home Safe?

Ultimately this is a journey of the heart. The added task for those of us who are aware and have the luxury and privilege of options, is to make enough room in our own hearts so that those who don't yet see can make this journey with us.



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But the reality is that these changes are changes that must take place within each of us first, not out there in the world of technology and economics. This journey to a sustainable and regenerative future will be the real heart work as we remember what we are part of, what we are capable of, and what our true nature is. This is a journey of the heart and those of us with the luxury and privilege of options have an added task of making room in our own hearts for future generations and for all those who don't have options and can't speak or act for themselves.

And Remember -

The way to subvert the dominant paradigm is to have more fun than they do and make sure they know it!



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And finally, a critical piece in this puzzle is that we must nurture our spirits and find joy in this work.



Thank you.