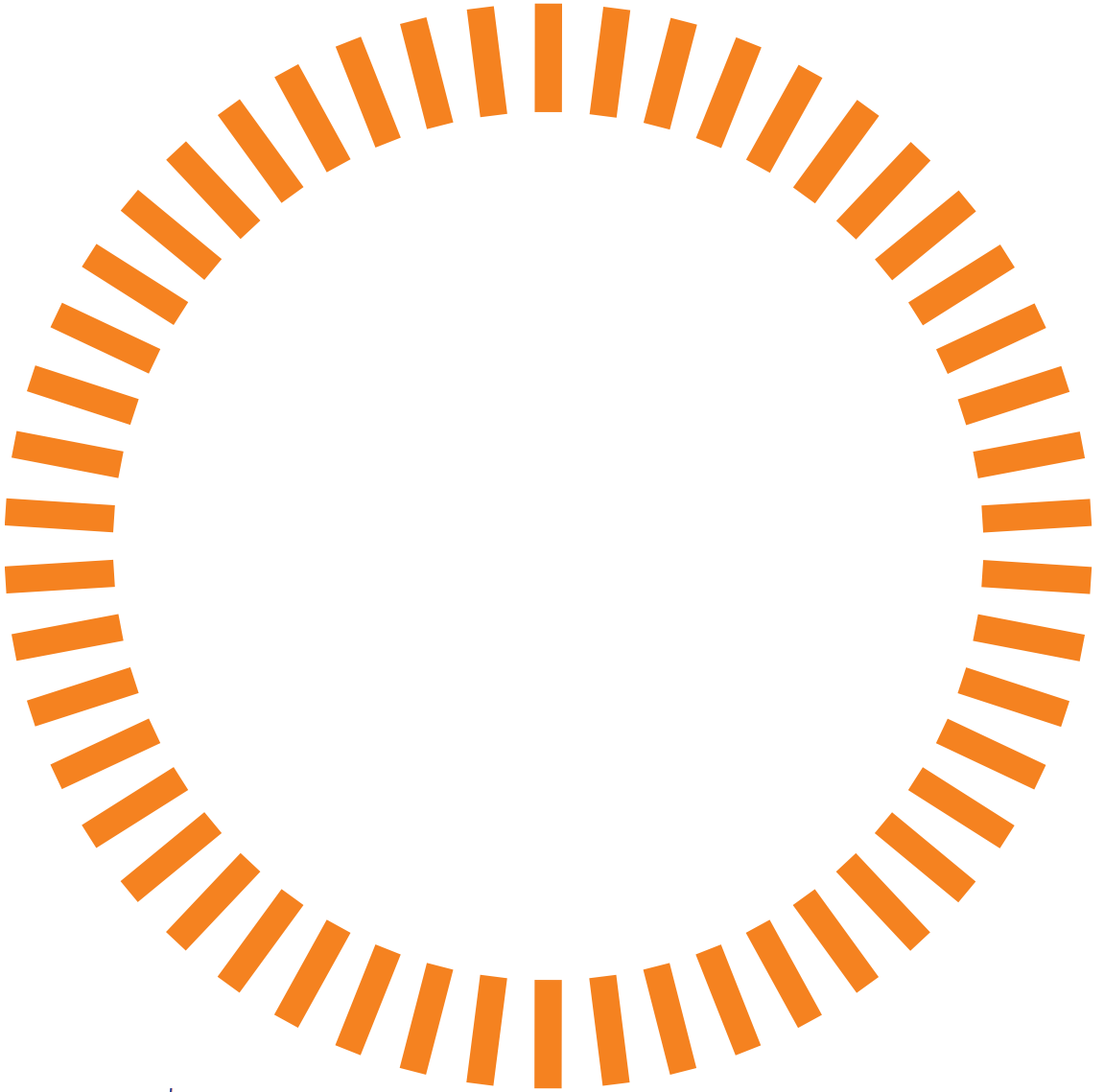


The Phoenix Economy

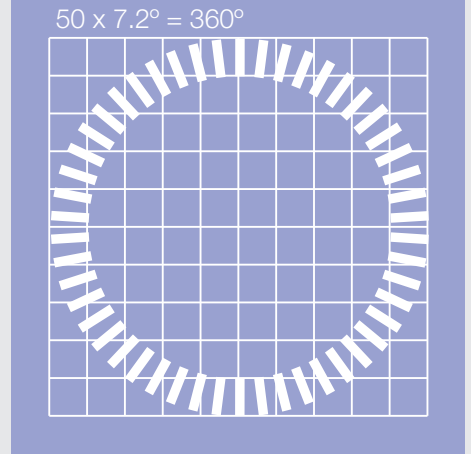
50 Pioneers in the Business
of Social Innovation



The Business of Social Innovation

Contents

Forewords	1
Executive Summary	4
1.0 Introduction	8
1.1 Entering the Discontinuity	10
1.2 The Surveys	11
2.0 Paradigm Shift	12
2.1 The 'Pathways to Scale' Model	14
2.2 The Phoenix Paradigm	17
2.3 Surprises	19
3.0 2009 Survey Results	20
3.1 Weathering the Storm	22
The downturn has hit funding—but entrepreneurs are confident that, as the shake-out continues, necessity will mother invention.	
3.2 Upgrading the Business Case	26
Although entrepreneurs see growth in the need for their services, the market research informing their business cases needs to be strengthened.	
3.3 Evolving the 'Ecosystem'	28
Entrepreneurs recognize the need to be part of 'ecosystems of change'—and to map and pursue 'pathways to scale'.	
3.4 Bridging the Macro-Micro Divide	30
There is an urgent and growing need to converge bottom-up with top-down approaches—to span the micro and macro levels of change.	
3.5 Delivering 'Government-as-Unusual'	32
Entrepreneurs expect government to play a central role in shaping markets—but want to help provide 'government-as-unusual'.	
4.0 The Phoenix Agenda	34
4.1 The Phoenix Manifesto for Political Leaders and Governments	36
4.2 The Phoenix Prospectus for Business Leaders	38
4.3 The Phoenix Syllabus for Business Educators	40
5.0 Pioneers	42
The Phoenix 50 List	44
Notes	48



Darwin lives, in the sense that natural selection pressures are working across global markets in powerful new ways. In 2009, we seem to be at one of those infrequent economic tipping points, also experienced in years like 1919, 1929, 1939 and 1989. Among other things, the current economic discontinuity is forcing a profound reassessment of public and private sector investment in areas such as corporate responsibility and sustainable development—all at a time when climate change and global inequalities are reaching critical limits and demanding urgent attention. The uncomfortable reality is that we still have a great deal to do if the new century's challenges are to be addressed effectively, in time and at the necessary scale.

It may be understandable, but disproportionate effort continues to be lavished on shoring up the dinosaurs of the old order, rather than investing in the new pioneers, who are working hard—and often against the odds—to incubate and scale market solutions essential for a sustainable future.

In this report, we aim to show that a new Phoenix Economy is, nonetheless, self-assembling—focused on providing social and environmental solutions, where markets and governments have failed. If the pioneers of the Phoenix Economy are to succeed, they will still need substantial assistance from governments, foundations, investors and businesses, and we identify urgent opportunities for facilitation, collaboration and support. We also celebrate a roll call of the Phoenix 50 pioneers in the business of social innovation, nominated by entrepreneurs and other stakeholders.

Please note that this is a report to—not by—the Skoll Foundation. We are profoundly grateful to the Skoll team for their support, but underscore the fact that they only saw the text of the report at a very late stage. In future years, we plan to broaden out our coverage to a Phoenix 500, with change-makers themselves driving the selection and assessment processes. Please help us towards that goal by commenting on our version 1.0. E-mail us at phoenix@volans.com

John Elkington

Co-founder of SustainAbility (1987) and
Co-founder of Volans (2008)

Alejandro Litovsky

Head, Pathways to Scale Program, Volans

Charmian Love

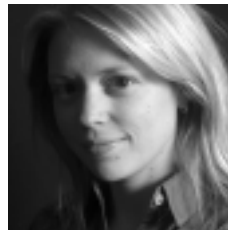
Chief Operating Officer, Volans



John Elkington



Alejandro Litovsky



Charmian Love

Seismic change is clearly underway, with the collapse of global financial markets threatening to make already critical challenges—climate change, water scarcity, geopolitical instability—much worse. But times of upheaval are also times of opportunity, as this latest report from our partners at Volans and SustainAbility makes clear.

A new generation of entrepreneurs, together with old warriors fighting the good fight, is coming up with big, bold ideas and exceptional innovations that light the way forward. *Growing Opportunity* (2007), the first report in this series for Skoll, charted the rise of an emerging breed of social and environmental entrepreneurs. The second report, *The Social Intrapreneur* (2008), revealed the inside story of transformative practices underway in mainstream corporations. Against the backdrop of a global economy in crisis, *The Phoenix Economy* breaks important ground once again, identifying the entrepreneurial organizations whose work speaks to a new order emerging from the ashes.

The report you hold in your hands also makes clear how tackling the Bull and Bear markets—that have dominated our ideas of value creation in recent decades—demands that we slay the dragon of fear and convention. Once again, John Elkington and his team give us good reason to hope. The Skoll Foundation is proud to support this pioneering research and trusts you will find the achievements and ambitions of ‘The Phoenix 50’ both provocative and inspiring.

Sally Osberg

President, Skoll Foundation



Sally Osberg



Maggie Brenneke

In our 20 years experience of analysing and advising companies on sustainable development, SustainAbility has found that a ‘burning platform’ is often a prerequisite for radical action. Be it Shell’s Brent Spar or BP’s Colombia experience, it took an unwelcome—and unexpected—shock to the corporate system to lead to an overhaul of business as usual. In this seminal year we see burning platforms everywhere.

Throughout the economy—from high finance to manufacturing—companies are fighting for survival. What their leaders decide now will determine not only their organisation’s fate, but that of the market system as a whole. The stakes are high and leaders across government and business face an opportunity to re-frame the terms of the debate. Winner-takes-all business models—concentrating wealth in the hands of a few or depleting our natural resources in the pursuit of profits—no longer hold credibility.

But, what will take their place? *The Phoenix Economy* introduces us to an inspiring group of changemakers whose bravery and vision may just be sufficient to blaze sustainable pathways out of the economic maelstrom. This compelling report highlights opportunities that—if sufficiently supported and scaled—could contribute to economic re-birth. We look forward to continued work with Volans and the Skoll Foundation to support promising innovators and entrepreneurs wherever they may be found.

Maggie Brenneke**Mark Lee****Sophia Tickell**

SustainAbility



Mark Lee



Sophia Tickell

Many Net Impact members may be experiencing market conditions that are unique in their (often short) working lifetimes, but *The Phoenix Economy* underscores the fact that times of crisis are also times of opportunity. Net Impact is pleased to have been involved in selecting the first round of the Phoenix 50—and we look forward to continuing the conversation on how we can extend the discussion and the joint working, to build a new order from the ashes of the old.

Liz Maw

Executive Director, Net Impact

Recent work by UNEP on sustainable ventures and entrepreneurial partnerships in developing countries has highlighted the need to have a good understanding of market conditions. This is all the more critical today, as market conditions are changing rapidly. It is both a time of crisis and opportunity, as we work with governments, business and others on the greening of economic bailouts and ‘New Deal’ packages.

The Phoenix Economy is a useful reminder that this is a multi-dimensional challenge. It helpfully spotlights some of the market pioneers now developing the entrepreneurial mindsets, technologies and business models needed to drive the necessary scale of change.

UNEP looks forward to working with Volans and others in engaging leading innovators and ‘superpreneurs’ across the spectrum of issues and potential solutions identified in this report. We welcome the prospect to convene these champions and help build a ‘voice’ for their agenda in the worlds of government policy-making and investment.

Sylvie Lemmet

Director, United Nations Environment Programme (UNEP) Division of Technology, Industry and Economics



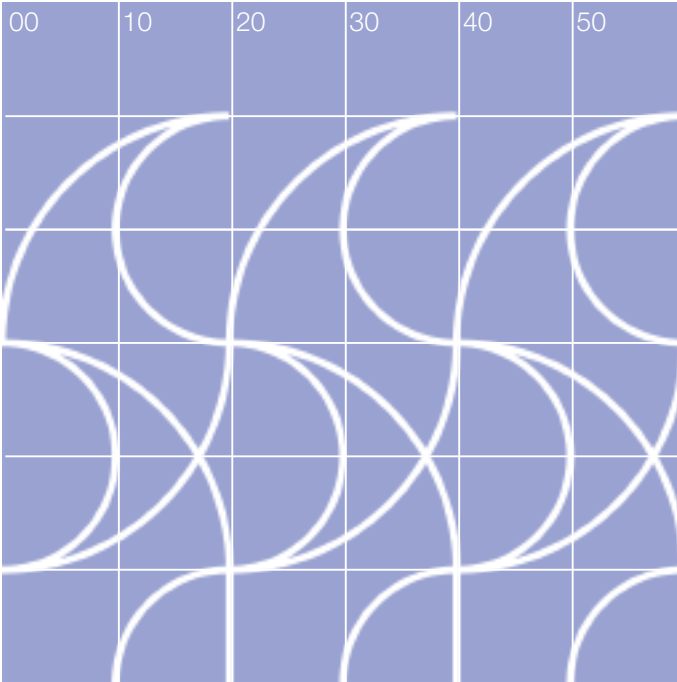
Liz Maw



Sylvie Lemmet

Disclaimer Designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of UNEP or other Volans partners concerning the legal status of any country, territory, city or area or of its frontiers or boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of UNEP or other Volans partners, nor does citing of trade names or commercial processes constitute endorsement.

A new economic order is rising from the ashes—and a new generation of innovators, entrepreneurs and investors is accelerating the changes essential for delivering scalable sustainable solutions to the world.



The Phoenix Economy, subtitled *50 Pioneers in the Business of Social Innovation*, is the first Volans market intelligence report. It reveals how leading entrepreneurs, investors and businesses are thinking as they develop and scale market solutions to a broad array of economic, social, environmental and governance challenges.

The report draws on new surveys of experts and entrepreneurs to identify trends and examples of how respondents are dealing with the current economic discontinuity, and—uniquely—spotlights 50 pioneers driving the development of a new, more equitable and more sustainable Phoenix Economy. Key findings include:

- The economic crisis has shaken confidence in old priorities, mindsets, incentives and investments, which are seen as increasingly bankrupt. This has helped to create growing public and political appetite for an alternative paradigm, driven by a very different set of sustainable values, priorities and targets. To date, however, most initiatives have been driven by short-term panic rather than by any clear-sighted, long-term vision of how our economic priorities must evolve.
- Any market transformation must be based on scalable solutions that bridge the micro-macro divide. This will require entrepreneurial successes at five key stages of business and market development: (1) breakthrough insight; (2) experimentation; (3) enterprise development; (4) creation of alliances and replication of success, and ultimately (5), mass market infiltration, involving economic and institutional transformations.

—Entrepreneurs, like all businesses, face increasingly tough financial challenges, but there is evidence that this is helping drive necessary adaptation. Many of our survey respondents anticipate new funding flowing into key sustainability ventures from a variety of sources, including ‘green new deal’ investment programs launched by governments. But these same entrepreneurs must now also develop the political ‘voice’ and presence to ensure their views and proposed solutions carry weight and build the necessary momentum to achieve scale and impact.

—Strikingly, in spite of the anticipated growth in markets for social and environmental solutions, timely, reliable and affordable market research is still generally lacking, particularly in emerging economies, leaving many entrepreneurs ill-served when it comes to building their business case.

The report concludes with a ‘Phoenix Agenda’ for enabling a paradigm shift, which sets out how governments, investors, businesses and business schools can best support new market pioneers in achieving the scale essential for more sustainable markets—and more equitable societies.

“We must be more creative and innovative in a time of crisis, and also be more efficient and effective.”

Albina Ruiz Ríos
Ciudad Saludable

Organisation	Pages
ABB	48
Accenture Development Partners (ADP)	11,38
Acumen Fund	26
Aflatoun	28,29,44
AIDG	26
AMEE	27,36,44
American Council on Renewable Energy (ACORE)	26,33,39,44
Apopo International	31,44
Aravind Eye Care System	27,40,44
Arup	30,31,37,44
Ashoka	13,25,37,44
Bain	26
Banco Real	11
BELL	24,26
Benetech	21,23
Better Place	19,28,31,37,44
Bridgespan	26
Build Change	48
Business and Human Rights Resource Centre	25,44
BYD Auto	27,44
C40	28,30,33,36,44
Carbon Disclosure Project	38
Celador Productions	37
CellBazaar	29,44
CERES	28,39,44
Ciudad Saludable	5,23
Cleantech Group	29,30,36,45
Climate Change Capital	27,45
Climate Group	48
Clinton Climate Initiative	44
Coca-Cola	11
Corporate Leaders Group on Climate Change, University of Cambridge	39
Danone	38,45
Dialogue in the Dark	26
E+Co	25,45
Earth Policy Institute (EPI)	9
Econcern	25,45
EcoVadis	36
Eden Project	38,39
EMBARQ	15,37,47
Evergreen	26
Extractive Industry Transparency Initiative (EITI)	37
First Book	23,26
First Peoples Worldwide	26
Flambard Holdings	24
Forest Stewardship Council (FSC)	37
Foster & Partners	30
Freeplay Foundation	23,26
Fuqua School of Management, Duke University	40
Generation Investment Management	28,39,45
GE's Ecomagination Initiative	18,19,45
GlaxoSmithKline (GSK)	18,19,27,45
Global Footprint Network (GFN)	15,45
Global Impact Investing Network (GIIN)	18,28,39,45
Global Reporting Initiative (GRI)	38
Goldman Sachs	39
Good Energy	45
Google.org	19,31,33,38,45
Grameen Group	31,38,44,45
Green for All	9,25,36,45
Haas School of Business, UC Berkeley	26,40
Hagar	38
Harvard Business School	40,48
Health Care Without Harm	9,26,27,37,46
Himanshu Parikh Consulting Engineers	31,37,46
Homeless World Cup	10,24
Honey Care Africa	26
IDEAAS	48
Independence Care Systems (ICS)	26
Innocentive	27,46
INSEAD	40
Institute for One World Health	26,27,46
Interpeace	29,46
J Craig Venter Institute	25,46

The Phoenix Economy references and celebrates a variety of organisations that are helping to develop and scale market solutions to some of the world's most pressing social and environmental challenges. A more detailed listing of the Phoenix 50 pioneers can be found on pages 42–47.

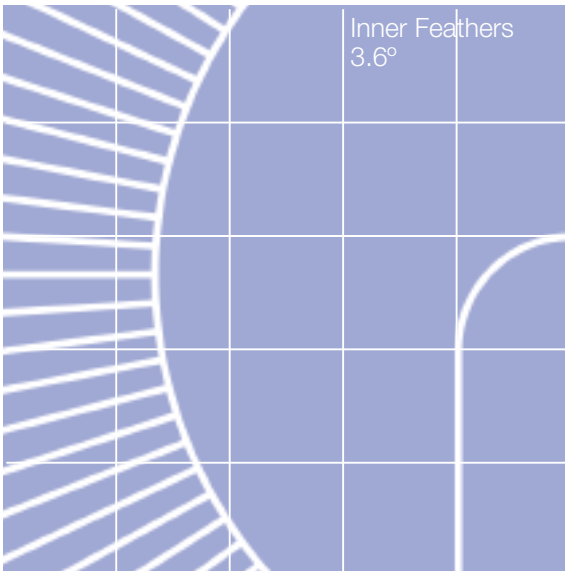
JumpStart	26	Roundtable on Sustainable Palm Oil	37
Kennedy School of Government, Harvard University	15,40	RugMark Foundation	24
Khmer Legacies	24	Säid Oxford Business School	15
Khosla Ventures	28	Self-Employed Women's Association (SEWA)	22
Kiva	23	Shorebank	39
Kleiner Perkins Caufield & Byers	28,31,33,46	Singapore's Economic Development Board (EDB)	15,18,37
London Accord	38,48	Skoll Centre for Social Entrepreneurship, Oxford University	40
Marine Stewardship Council (MSC)	28,29,37,46	Skoll Foundation	1,2,10,11
MaRS	29,36,37,46	Solar Aid	15,28
Mobility Aid and Appliances Research and Development Centre(MAARDEC)	48	Solarcentury	15,25,47
Monitor Group	26,48	State of California	33,47
Morgan-Stanley	11	Summer Advantage	24
Mothers2Mothers	25,46	SustainAbility	1,2,11,43
Movimento Nacional dos Catadores de Materiais Recicláveis	28,29,46	Sustainable Asset Management (SAM)	27,47
MyC4	25,46	Tällberg Foundation	15
National Endowment for Science, Technology & the Arts (NESTA)	36	Team Stupid	37
Net Impact	3,11,30,40,43	Technoserve	48
New Profit Inc	26	TNT	19,31,38,47
NOVICA	24	Toyota	17
Novo Nordisk and Oxford Health Alliance	19,29,38,47	Triodos	39
Nuestras Raices	26	US Climate Action Partnership (USCAP)	38
Obama Presidency	19,21,30,32,33,36,47,48	US National Intelligence Council (NIC)	26
Office of the Third Sector	21,36	United Nations	18
Participant Media	18,37,47	United Nations Development Programme	17
PATH	24,35	United Nations Environment Programme (UNEP)	3,28,36,39
PDA	25,47	Urban Logic	26
PricewaterhouseCoopers	38	Virgance	29,37,47
Recycla Chile	23	Wikipedia	13
Renault-Nissan	19	World Business Council for Sustainable Development (WBSCD)	27,33,38,47
Responde	26	World Resources Institute (WRI)	15,27,47
Riders for Health	26,27	World Toilet Organization (WTO)	25,47
Rocking the Boat	24	Youth Entrepreneurship and Sustainability (YES Inc.)	15
Root Capital	26,48		
Roundtable on Sustainable Biofuels	15,28,37		

“I am convinced we are about to go over the awareness tipping zone to an ‘everyone a changemaker’ world.”

Bill Drayton

Ashoka

Times are tough and getting tougher, but leading social and environmental entrepreneurs are confident that—with the right assistance—the time is ripe for a true paradigm shift to a more sustainable economy.



Commentators have struggled with what to call the current downturn—a recession, a slump or a depression? We call it a ‘discontinuity’. Early on, politicians and business leaders predicted that the recovery would come within months or, at most, a few quarters. Soon, however, the sense grew that something different was afoot—and parallels were drawn with the onset of the Great Depression of the 1930s.

As a result, 2009 started with a flurry of bailouts and talk of Keynesian ‘New Deals’.¹ Much of this effort, however, was reactive and poorly coordinated. Huge amounts of money went to prop up iconic giants of the old economy, money that might have been better invested in the new market solutions and infrastructures necessary to meet twenty-first century needs: the proposed Phoenix Economy of this report.

Still, the economic discontinuity is engendering a radical economic clear-out that is likely to open out new opportunity spaces for scalable entrepreneurial solutions to many of the world’s critical economic, social, environmental and governance challenges. Indeed, as *The Phoenix Economy* report raced towards the finish line, Van Jones of **Green for All**—one of our Phoenix 50 pioneers—wrote to say that \$500 million had gone into the US economic recovery bill for green jobs training.

Good news, as far as it goes, but likely only the beginning of a transformative process that will take decades to work through—a point long made by Lester Brown of the **Earth Policy Institute** in his inspirational work on Plan B,² addressing the challenges of ‘rescuing a planet under stress and a civilisation in trouble’.

Meanwhile, although blame is being heaped on the governance and management of the financial sector for the failure of the banks to count, manage and hedge their risks, we must look deeper for the true culprits. The root cause ultimately tracks back to a flawed mindset—part of our prevailing paradigm—that both permitted and drove high-risk appetites and behaviours with consequences far beyond the world’s financial system.

As James Lovelock recently observed at the launch of his book—*The Vanishing Face of Gaia: A Final Warning*—our ecological debt far outweighs our financial debt and the ensuing ecological crunch will be severe. This sentiment was echoed by our survey respondents and interviewees who stressed that the world now faces multiple crunches in areas such as energy security, food, biodiversity, pandemic risks and climate instability, amongst others.

“The 21st century economy is going to be a green economy. Health Care Without Harm is right in that slipstream.”

Gary Cohen

Health Care Without Harm

In discussing the potential of the current economic discontinuity to drive change in desirable directions, we acknowledge that such turbulent periods also tend to trigger reactive measures and behaviours, such as protectionism, xenophobic sentiment, extremist politics and intergenerational tension and conflict, particularly where inequities are severe and mechanisms of governance and justice are weak. In short, a positive outcome to our current crisis is by no means guaranteed, which places a premium on bold, far-sighted and effective leadership in the public, private and citizen sectors. Success will depend crucially on the initiative and achievement of many of the innovators and entrepreneurs covered in our 2009 survey—the third in a series carried out with the help of the **Skoll Foundation** and other partners.

Our respondents believe that the prospect of a true paradigm shift has never been greater—in the original sense of the term ‘paradigm’: a prevailing worldview and what is taken for normality. The implications for their organizations and agendas are profound—indeed a number of respondents requested anonymity on the basis that their projections could raise real question marks over their prospects. Most, however, remain upbeat.

“People are looking around for solutions—we have them. We are exactly in the right space just now.”

Mel Young

Homeless World Cup

Since the late 1990s, members of the Volans team have been spurred by the conviction that the early decades of the twenty-first century would indeed see a true paradigm shift, accelerated by the end of one long-wave economic cycle and the beginning of another.⁴ The market leaders highlighted during our Skoll Foundation-funded work, we believe, provide important early clues as to where mainstream enterprise, business, financial institutions and governments will need to head in the coming years.

While our initial 2007 Skoll Survey (conducted by SustainAbility) investigated the business implications of the work pursued by social and environmental entrepreneurs⁵ and the second—carried out by SustainAbility in 2008—focused on the work of social and environmental intrapreneurs working in mainstream corporations like **Accenture**, **Banco Real**, **Coca-Cola** and **Morgan-Stanley**,⁶ our aim in *The Phoenix Economy* is to begin an exploration of how we can harness today's economic turmoil to spur the long-term transformation of capitalism and markets.

To gauge the impact of ongoing market trends on leading social and environmental entrepreneurs, Volans conducted several linked surveys in 2008 and 2009:

—The first, in June 2008, explored the interest, and experience, of over 50 entrepreneurs in working with mainstream business.

—The second, in December 2008 and January 2009, tested practitioner views on the implications of the current economic discontinuity via a survey of social and environmental entrepreneurs, with 114 responses.

—The third, in February 2009, explored wider professional views via a survey of experts and opinion-formers, receiving responses from 391 members of the Volans and **Net Impact** networks and 36 members of the **SustainAbility** Faculty.

Net Impact is a leading global network of students and alumni committed to having a positive impact on society. They represent the sort of thinkers and leaders who will help drive the development of the Phoenix Economy over the next decade. The thinking and priorities of their members are threaded through what follows, including their suggestions on the organizations that should be listed in our first Phoenix 50 (Chapter 5).

In this report, we look at the growing need for transformational change (Chapter 2), introducing the need for a greater focus on entrepreneurial 'pathways to scale'. Then we explore five trends that emerged from our analysis of the surveys (Chapter 3). Finally, we lay out an agenda for: political leaders and governments; business leaders and financial institutions; and business educators (Chapter 4).

A paradigm shift is under way—with profound implications for society, and for politics, economics and entrepreneurship in particular.



The thing about paradigms is that they persist for what seems like an eternity—and then turn inside-out in what seems disconcertingly like an instant. As the older economic order begins to implode, the potential for a shift towards a more equitable and sustainable Phoenix Economy is emerging from conversations with leading innovators and entrepreneurs around the world. While our survey respondents and interviewees accept that the near-term future may seem dark, they also recognize that the resulting shake-out of the older order promises to create the conditions for the emergence of new thinking, new models, and a new landscape of opportunity—much of which underlies our framing of the Phoenix Economy.

Turn to *Wikipedia* and you find that the phoenix is a mythical bird with many-hued plumage. It symbolizes longevity—sustainability—with a life expectancy of at least 500 years. At the end of its life cycle it is consumed by flames, and a new bird rises from its ashes. Even today, the phoenix is understood in many countries as a symbol of regeneration.

By extension, the ‘Phoenix Economy’ symbolizes the various strands of social and environmental innovation and enterprise that will help create a more equitable and sustainable future. At a time when governments are attempting to ‘green’ the growing number of bailouts and ‘New Deals’, the Phoenix Agenda is a reminder that there is a wider spectrum of challenges that will need to be tackled in the coming decades.

Some leaders in the field are bullish. “I am convinced we are about to go over the awareness tipping zone,” says Bill Drayton of **Ashoka**, “to an ‘everyone a changemaker’ world. Over the last summer, we studied the patterns of transformation (as in the civil rights and women’s movements) and found they all followed the same pattern. We are now moving into a time when the public at large engages—and the small pioneer islands swallow the whole.”

Paradoxically, however, at precisely the moment when awareness of, and need for, the services these entrepreneurs provide is skyrocketing, their funding—particularly the financing needed to replicate and scale their impact—is coming under growing pressure. And, with few exceptions, they believe things will get worse.

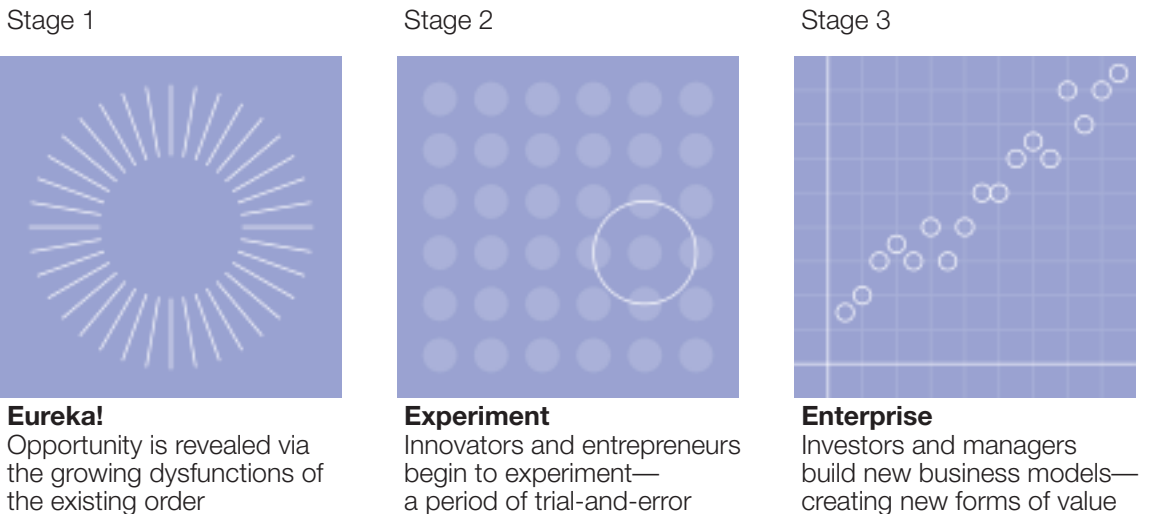
The Phoenix Economy symbolizes the various strands of social and environmental innovation and enterprise that could help create a more equitable and sustainable future.

So what exactly are these pioneers trying to achieve? Drawing on survey responses and interviews, we evolved a simple, 5-stage 'Pathways to Scale' model of change (Figure 2.1). Each new business model will typically begin at Stage 1, with the early recognition of an opportunity for a new solution: the 'Eureka!' moment. In Stage 2, that initial idea is put to the test, with prototypes and experimentation. Over time, successful experiments evolve into solutions around which new, Stage 3 business models and enterprises are created. Stage 4 sees the focus shift to the evolution of broader ecosystems of change agents—involving a growing number of public, private and citizen sector partnerships, followed by secondary waves of imitation.

Ultimately, if anything like a truly sustainable and equitable future is to be achieved, entrepreneurial initiatives will need to scale up further to Stage 5 system change—typified by broad-based market and societal adoption of new mindsets, models and technologies. Success in moving from Stages 4 to 5 will involve the transformation of political priorities, governance process, market rules and cultures. The Phoenix 50 pioneers, spotlighted in this report, are helping to catalyze such changes, though their ability to replicate and scale their successes—to reach critical mass. Their longevity and impact will depend on their ability to respond in good order to the challenges identified in Chapter 3, including coping with the evolving funding crisis.

Figure 2.1

5-stage 'Pathways to Scale' model of change



A key element of our work on the Phoenix Economy has been our Pathways to Scale Program, headed by Alejandro Litovsky. This action-research program builds on earlier work reported in *The Power of Unreasonable People*⁷ and is building the methodologies, tools and activities based on the Pathways to Scale 5-stage model, to help leaders scale up the impact of their initiatives. This work is featured on the Volans website—and includes ‘market intelligence’ briefs on Phoenix markets and ‘ecosystem’ briefs on how trailblazers are working together to shape tomorrow’s markets in areas such as solar power and sustainable mobility. Our series of ‘Conversations on Scale’ profile the thinking and strategies of leaders for growing their impact. Early postings include:

—Jonathan Kua, Director of International Organisations Programme Office (IOPPO) at the **Singapore Economic Development Board (EDB)**, explains how the city state plans to grow the social enterprise sector by being home to international social enterprise enablers as well as regional social enterprises.

—Mathis Wackernagel, Executive Director of the **Global Footprint Network (GFN)** explains how Footprint metrics work for companies and countries, and how GFN intends to go to scale.

—Nick Sireau, Executive Director of **Solar Aid**, and Jeremy Leggett, founder and Chairman of **Solarcentury** and **Solar Aid**, explain how to scale up markets for solar businesses in East Africa and South America.

—Charlotte Opal, Coordinator of the **Roundtable of Sustainable Biofuels**, reflects on how to scale up market rules for the sustainable production and trade of biofuels, as they launch the first version of the voluntary standard.

—Nancy Kete, Director of **EMBARQ**, the Center for Sustainable Transport of the **World Resources Institute (WRI)**, reflects on the success of transport partnerships in Istanbul and Mexico City, and the strategies for reaching the world’s most populated cities.

The Pathways to Scale team is taking this work forward in a number of ways, including: a session on scaling up sustainable mobility solutions at the 2009 Skoll World Forum at the **Säid Oxford Business School** in the UK; an action-research project conducted with **Harvard Kennedy School of Government** graduate students; and a project with the Rework! initiative, a global partnership between the **Tällberg Foundation** in Sweden and **Youth Entrepreneurship and Sustainability (YES Inc.)**.

Stage 4



Ecosystem

Critical mass is achieved through alliances and imitation

www.volans.com/pathways

Stage 5



Economy

The economic system flips to a more sustainable state—driving market and institutional transformation

Figure 2.2

The Phoenix Decade (2010–2020)

Fear

Hope



Decade 2
2010–2020



Decade 1
2000–2010

Twentieth century capitalism was driven by alternating ‘Bull’ and ‘Bear’ markets, and the twenty-first century’s first decade (2000-2009) has seen the collapse of the greatest Bull market in history. By contrast, a very different oscillation is now emerging as a driver of political, economic and business priorities. We expect the coming decades to see growing competition between ‘Dragon’ and ‘Phoenix’ models of wealth creation, superimposed upon—not replacing—traditional Bull and Bear dynamics (Figure 2.2).

The Bull and Bear fight it out in a single bottom line world. Both tend to be short term in focus. By contrast, Dragon and Phoenix mindsets tend to be longer term in orientation. Dragon markets, particularly China’s (until-recently-booming) economy, are often based on longish term planning, but are powered by business models and value chains that largely follow the path of Western industrialization, and—as a result—are likely to be increasingly taxed by environmental and natural resource constraints.

To date, Dragon economies have focused, at best, on a double bottom line of economic growth and the maintenance of sufficient social cohesion to keep the national locomotive on the rails. In hard times, Dragon mindsets are likely to default to economic nationalism.

The Phoenix Economy, by contrast, blurs across national borders and works to integrate the triple bottom line of economic, social and environmental value added into its DNA—as a triple helix of change and new growth.

This involves what Thomas Kuhn—author of *The Structure of Scientific Revolutions*—called a paradigm shift in the way we think about the future and about value. As the Phoenix paradigm evolves, inevitably, extraordinary new market opportunities will be created. One way to grasp and map the new opportunity spaces is to think in terms of a spectrum of value (Figure 2.3). Biotechnologists label application areas by color, with ‘red’ standing for health applications, for example, and ‘green’ for environmental applications.⁸

Innovators like the Phoenix 50 operate freely across that spectrum of value creation, delivering new or improved ‘value blends’. Growing effort is being devoted to understanding their dynamics and pathways to scale, as in the work of the **United Nations Development Programme**⁹ and the **Cleantech Group**. But given that the problem is often market failure, no amount of market research can bridge the gaps. That’s why the market-shaping policies of the **Obama Presidency**—which recently recruited another of our Phoenix 50 pioneers, Van Jones of **Green for All**—are so extraordinary. They speak of a new paradigm, of a fledgling Phoenix Economy.

The Phoenix Economy, by contrast, blurs across national borders and works to integrate the triple bottom line of economic, social and environmental value added into its DNA—as a triple helix of change and new growth.

Figure 2.3

Across the Value Spectrum

Organisation	Principle	Valuation
General Electric (GE) 'Ecomagination' Initiative	Market demand for solutions is growing fast	Revenues from GE's range of energy efficient and environmentally targeted products and services surged to \$17 billion in 2008, with a projection of \$25 billion by 2010. ¹⁰
GlaxoSmithKline (GSK)	The 'access' agenda, in such areas as drugs, energy and water, is a real pain for main-stream companies, but also signposts future markets	GSK cut its prices for all drugs in the 50 least developed countries to no more than 25% of the levels in the UK and US—and less if possible—and pledged to make drugs more affordable in middle-income countries such as Brazil and India. ¹¹
Global Impact Investing Network (GIIN)	Even the biggest animals and markets start with small seeds	Over the next 5–10 years, social impact investing could grow to represent about 1% of estimated current assets under management—about \$500 billion. ¹²
Participant Media	Culture change must involve the media industry	The producers of films like <i>An Inconvenient Truth</i> have developed active working relationships with over 80 non-profits in mainstream media projects, focused on sustainability issues and reaching over 20 million people.
Singapore Economic Development Board (EDB)	Don't just focus on green jobs, focus on clusters	EDB has announced a S\$350 million fund to support the development of the cleantech industry in Singapore, estimating the sector will generate S\$1.7 billion in value-added business, creating 7,000 jobs by 2015. ¹³
Stern Review on the Economics of Climate Change	A new paradigm means new ways of looking at our world and at markets	In 2006, the Stern Review of the Economics of Climate Change, produced for the UK government, argued that the benefits of taking action to stabilise greenhouse gases by 2050 (minus the costs) would amount to a 'profit' of \$2.5 trillion (£1.32 trillion). ¹⁴ Lord Stern now warns governments need to prepare for temperature rises of 4–6°C.
United Nations	United action is crucial for global change	The UN already argues that 'one third of the around \$2.5 trillion-worth of planned stimulus packages should be invested on 'greening' the world economy. The estimated \$750 billion of green investment, equal to about 1% of current global GDP, could trigger significant, multiple and potentially transformational returns.' ¹⁵
US Green Deal	Government policy and spending is central	\$43 billion out of a \$787 billion spending bill earmarked for renewable energy.

There were a number of surprises in the survey results. We were forcefully struck, for example, by the number of mainstream companies that made it into the final list—when we had started out thinking mainly in terms of social and environmental enterprises.

They included **General Electric (GE)**, with its **‘Ecomagination’ Initiative**,¹⁶ **Google.org** for its focus on renewable energy and other sustainability issues, **GSK** for its industry-consensus-shattering announcement that it would radically cut the cost of its drugs to the world’s poorest countries, **Novo Nordisk** for its work with the **Oxford Health Alliance** (which is about preventing and reducing the global impact of chronic disease, around three risk factors—tobacco use, physical inactivity and poor diet) and **TNT** for its work on providing the logistics for disaster relief and other large-scale initiatives, including tree planting in East Africa.

We were also struck by the way that the United States—and the **Obama Presidency** in particular—dominated the nominations. But if any one organization summed up the Phoenix mindset and approach for us, it was Shai Agassi’s **Better Place**. Based in the USA, it is increasingly global in its operations.

Agassi, formerly a top executive at German software company SAP, has developed a business model that treats cars as if they were mobile phones, with drivers able to pay a monthly fee to charge their vehicles at easy-to-use battery stations. The aim is to convert cities and ultimately countries to electric vehicles. Already countries like Australia, Denmark and Israel have signed up, together with states like California and Hawaii, and cities like Toronto. Their approach—which involves mobilizing all levels of government, major companies (like **Renault-Nissan**) and investors—is a prototypical example of what expect to see as the Phoenix paradigm takes hold and the relevant forms of innovation and entrepreneurship takes flight.

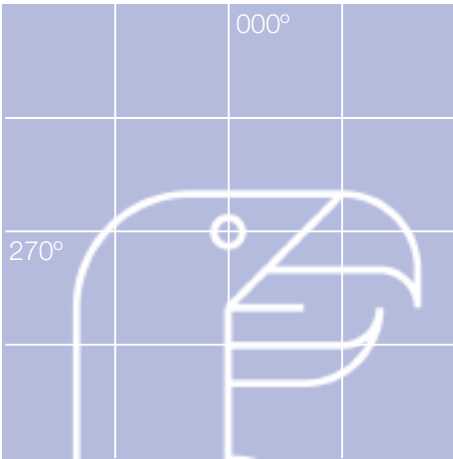
Question: do you see anything good about the economic downturn?

“Yes. Publishers and book distributors are much more interested in dealing with us, and the terms are more flexible.”

Kyle Zimmer

First Book

Entrepreneurs say that five trends are driving change—though the impact and implications of the evolving economic discontinuity are currently top of mind.



It is an uncomfortable fact that economic and social systems—like ecosystems—go through periods of convulsive change. Social and environmental entrepreneurs and intrapreneurs may be in the spotlight as never before, but we are seeing a shakeout that will hit both weak and strong organizations. “Down cycles weed out weak players,” Jim Fruchterman of **Benetech** comments, and, sadly, “some great groups get weeded out because of bad timing.”

Many survey respondents were increasingly somber, seeing a profoundly challenging period ahead. This should be of concern to leaders in the public, private and citizen sectors alike, given that the work of many entrepreneurs spotlights and seeks to address critical issues like climate change, water scarcity, poverty, disease, corruption and an expanding array of human rights concerns. Entrepreneurs are worth watching because they are experimenting with new technologies and business models, underscoring the potential for transformational solutions and change.¹⁷

Happily, the contributions of such entrepreneurs are increasingly recognized and celebrated by some governments, from the UK with its **Office of the Third Sector** to the United States with the **Obama Presidency’s** broad-spectrum change agenda. In ending his Inaugural Address with the words “future generations”, President Obama underscored the challenges the world faces as the human population adds another 1.5 billion people by 2025 and systemic stresses linked to climate, water, poverty and disease intensify.¹⁸ The challenge of developing economic and business models that will work in today’s world is increasingly urgent, but we also need models that will create real value and impact efficiently, effectively, equitably and above all sustainably in a world projected to reach 9–10 billion by mid-century.

So how do leading entrepreneurs see the challenges and opportunities today? Our survey results spotlight five trends that will shape the agenda:

- 1 Weathering the Storm
- 2 Rebooting the Business Case
- 3 Evolving the ‘Ecosystem’
- 4 Bridging the Micro-Macro Divide
- 5 Delivering Government-as-Unusual

Figure 3.0

Weathering to Delivering

Five trends that will shape the agenda



Most entrepreneurs say the downturn has already hit funding—but even as the shakeout builds and cost efficiency measures are put into effect, necessity will be the mother of profound reinvention.

As the downturn began to bite in earnest, entrepreneurs found themselves—and their beneficiaries—caught in a tightening vise. 50% of respondents had already been affected (Figure 3.1).

From India, **Self-Employed Women’s Association (SEWA)** founder Ela Bhat reported that, “**SEWA**’s members in the informal sector specifically construction workers, rag pickers and garment stitchers, have been adversely affected because of the economic crises. They have lost their work and employment. As a result children are being withdrawn from the school and joining their mothers in work, particularly girls—and there is widespread starvation.”

In fact, **SEWA**’s members have been experiencing financial crises for the last three years. Bhat continues: “**SEWA** was in a situation where it could have succumbed to this crisis. However, our members turned this around as an opportunity to revise our strategy and achieve financial self-reliance. As a result, members’ economic organizations have been able to achieve 70% financial self-reliance. This has reinforced our confidence of reaching our impact.”

Less positively, the global situation is likely to worsen as capital flows to emerging markets are choked off by the financial crisis in the advanced economies.¹⁹ The credit crisis is also squeezing funding to leading social and environmental entrepreneurs, impacting the value of foundation endowments—and thus the disposable funds. Although some entrepreneurs report increasing support and growing confidence, a clear majority notes a deteriorating prospect for future funding. One consequence will be growing interest in the diversification of revenue streams.

Figure 3.1

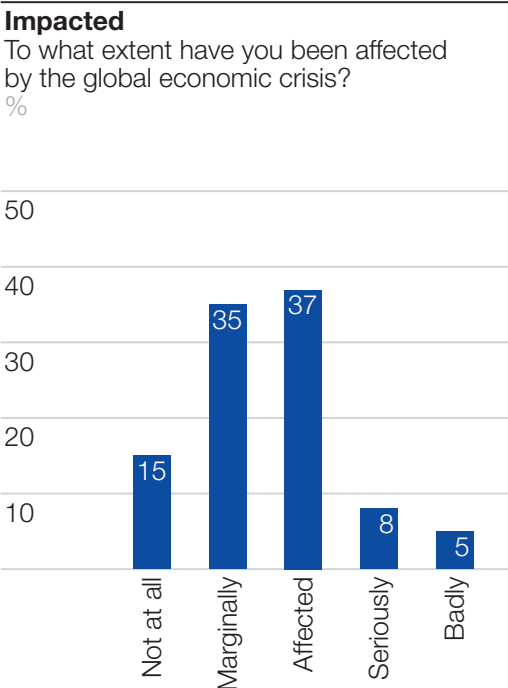
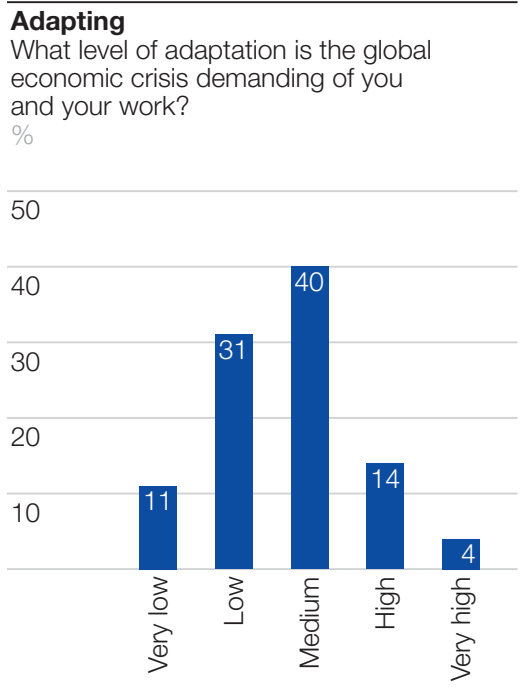


Figure 3.2



Rather than a profound process of adaptation, what we see to date from our survey is mainly a process of cost reduction—hardly surprising, given that less than a fifth of our respondents said the pressure to adapt was already ‘high’ or ‘very high’ (Figure 3.1). Significantly, however, 40% said the pressure was ‘medium’—although the comments made it clear that many respondents expect the pressures to grow. Asked how long they expect the downturn to last, 45% of our respondents thought 1.5 to 3 years (Figure 3.3), though there were outliers expecting a more protracted crisis. Our own assumptions skew strongly to the right hand side of the time-line.

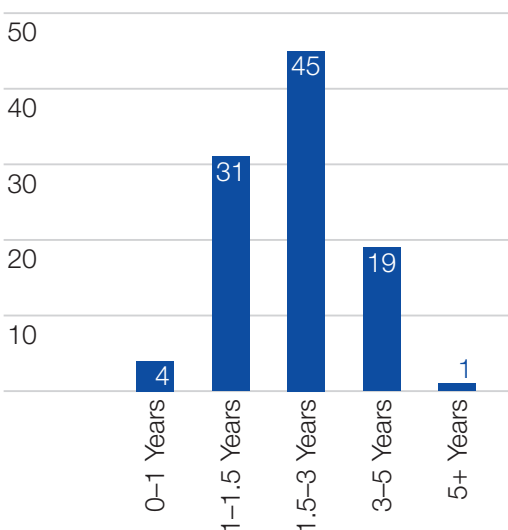
Respondents were eloquent on the scale of the impact to date: “Our microfinance program is suffering because local banks are not lending us money,” said one prominent Latin American entrepreneur, who asked to remain anonymous. “When they do, they have shortened the term to 3 months and doubled the interest rate, from 10% to 20%.” From Peru, Albina Ruiz Ríos reported that the price of the PET plastic that **Ciudad Saludable** recycles had dropped from \$500 to \$150 a ton.

Figure 3.3

Assumptions

How long do you think the global economic crisis is likely to continue?

%



Further south, Fernando Nilo of **Recycla Chile** noted that the smelters they sell metals to held payment for 60 days—and were only persuaded to pay with the support of lawyers.

Adaptation is well under way in many organizations. “We have shifted staff substantially towards our revenue engine, The First Book Marketplace,” explained Kyle Zimmer of **First Book**. **Kiva** co-founder and CEO Matt Flannery replied that the micro-lending organization planned to “return to a scrappy attitude,” emphasizing the opportunistic, irrepressible and determined mindset and behaviors of a start-up. Once again, however, there is a sense that whilst the funding crisis is profoundly unwelcome, coming at a time when many entrepreneurs are under pressure to replicate and scale their operations, there could be significant upsides. “New ideas and approaches will spring forth,” noted Kristine Pearson of the **Freeplay Foundation** “necessity, once again, will be the mother of invention.”

The key challenge for many, as **Benetech**’s Jim Fruchterman put it, is to get through “the valley of death”. For that to happen, respondents see an urgent need for key actors to adopt elements of the agenda outlined on pages 35–40.

In terms of the types of adaptation required, respondents made the following points:

—Focus on efficiency

Many respondents are aiming to do more with less. “We made plans to reach the same targets with less income,” reported Yuval Wagner of Access Israel. “While maintaining quality,” said former **BELL** and current **Summer Advantage** USA CEO Earl Martin Phalen, “we are making decisions about what we can do without.”

—Adopt a defensive posture

This approach was reported with some frustration by entrepreneurs with a passion to grow. “We have a great core business,” said Roberto Milk of **NOVICA**, “it’s just that all plans are delayed through the crisis.” Many respondents were already slowing recruitment or actively cutting staff. “We have become very cautious about adding new positions that may not be sustainable if the economy gets worse. At the same time, we must continue to add those positions necessary to manage continued growth,” said Chris Elias of **PATH**.

—Closer internal oversight

Governance and management are increasingly important. “We’ve set up a committee of board and staff to ensure we’re constantly monitoring the situation and considering how to adapt our strategies accordingly. We’re not in emergency mode, but rather looking for ways to find new opportunities in a changing landscape.” said Nina Smith of the **RugMark Foundation**.

—Develop scenarios

Organizational strategies will have to be adaptive to the context of considerable uncertainty. “We are developing multiple 2009 budgets that react to varying degrees of income reduction,” reported Adam Green of **Rocking the Boat**.

—Adapt business models

There is a growing need for flexibility and diversification. Some not-for-profit entrepreneurs are setting up for-profit arms, and vice versa.

—Think about mergers

“I am considering allowing the organization to merge with other organizations,” admitted Socheata Poeuv of **Khmer Legacies**.

—Don’t forget growth

Such times open out “opportunities to make long-term moves,” as Rory Stear of **Flambard Holdings** put it. As a result, some entrepreneurs are distinctly upbeat. “We plan to grow significantly,” said Mel Young of the **Homeless World Cup**.

“We have made plans to reach the same targets with less income.”

Yuval Wagner

Access Israel

When it came to future funding, the sources seen as most attractive are shown in Figure 3.4. The interest in relatively ‘soft’ money is notable. Foundations (72%) lead by a wide margin, followed by government grants and loans (56%). Moving to the harder end, we come to making sales/charging fees (49%), attracting help in kind (42%) and public fund-raising (40%), with joint venturing (33%) and venture capital (28%) perceived as relatively less forth-coming sources of finance.

It is clear, however, that even in tough times the optimism of entrepreneurs is unabated. A significant majority (60%) remain confident that they will continue to achieve real impact.

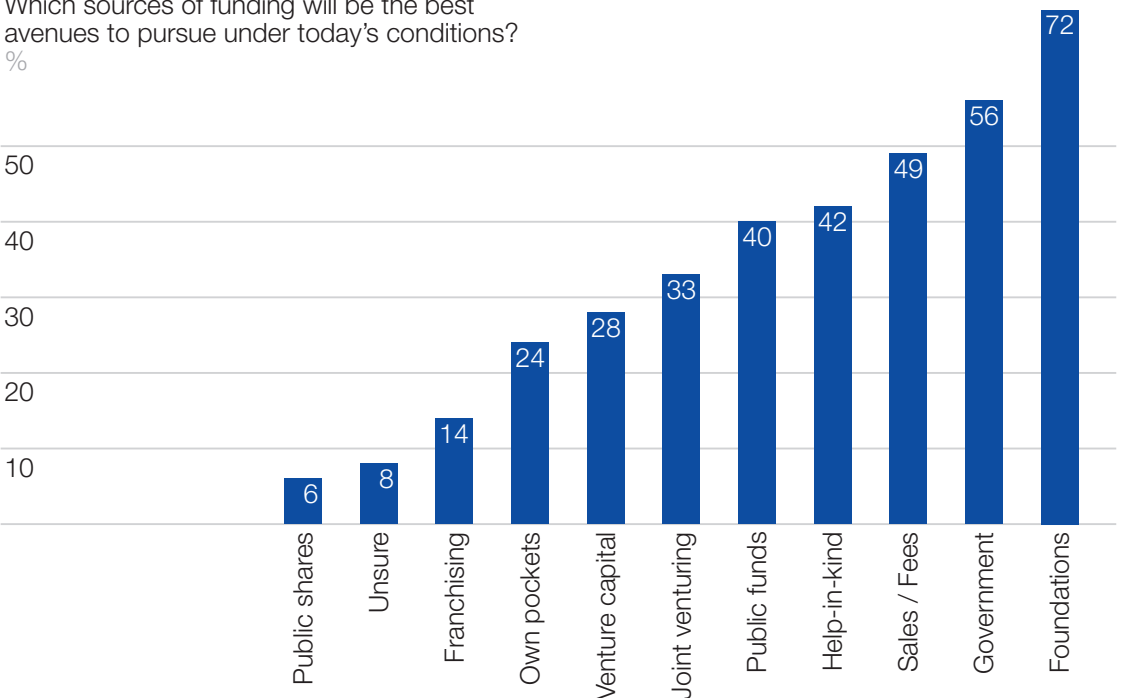


All sectors and pretty much all geographies will be impacted by the economic discontinuity. Some Phoenix 50 organizations will go under, others will be sorely squeezed—and a proportion will emerge transformed. As the pressures build, some Phoenix 50 pioneers are moving deftly into the political game—among them **Green For All. Others are redoubling their efforts to create new funding sources for entrepreneurs, including **MyC4**. As the social fall-out grows, there will be growing need for the services offered by such Phoenix 50 organizations as the **Business & Human Rights Resource Centre**, **Mothers2Mothers**, **PDA** and the **World Toilet Organization (WTO)**. They will increasingly need the support of organizations like **Ashoka**. The parallel energy crisis will create new opportunities for such trailblazers as **E+Co**, **Econcern** and **Solarcentury**. And, in the background, some of our wild card listings continue to explore less obvious aspects of the Phoenix Economy, in the case of the **J Craig Venter Institute** focusing on synthetic biology and potential new routes to sustainable energy.**

Figure 3.4

Future funding sources

Which sources of funding will be the best avenues to pursue under today’s conditions?
%



Although entrepreneurs see an inexorable rise in the need for their services, the available market research is weak. As they move to scale, that is likely to be a growing gap—and opportunity space.

Huge growth in demand is expected for what social and environmental entrepreneurs do and provide. The **US National Intelligence Council (NIC)** reported, late in 2008, that by 2025 a whole spectrum of new challenges would test global leaders in the public, private and citizen sectors.²⁰ Alongside “the unprecedented transfer of wealth roughly from West to East now under way” and seen as likely to “continue for the foreseeable future,” the NIC foresaw a range of factors driving “unprecedented economic growth”, which, coupled with the addition of 1.5 billion more people, “will put pressure on resources—particularly energy, food, and water—raising the specter of scarcities emerging as demand outstrips supply.”

The economic downturn will slow—but not stall—this momentum. Some of our survey respondents see the current downturn as necessary, if painful. “This is an over-due correction,” as Victoria Hale of **The Institute for One World Health** put it. “This is a moment for change—if we can do it deliberately,” said Rebecca Adamson of **First Peoples Worldwide**. “People might be a little less certain that greed is a driver for a sound economy,” as Barry Coleman of **Riders for Health** noted. His partner Andrea also saw potentially positive impacts in that “charities will be forced to think in a socially entrepreneurial way.” As a result, others argued, there needs to be even greater focus on the business case for change.

The downturn, said Gary Cohen of **Health Care Without Harm**, “has forced us to strengthen the business case for environmentally responsible healthcare—and demonstrate how our programs save hospitals money that could be better used for patient care.” “There is no better time for innovation or invention than when facing broken systems,” said Jacqueline Novogratz of **Acumen Fund**.

Given how important market research is to mainstream entrepreneurs preparing their business case, we asked what sources of market research entrepreneurs are using. “Alas, this is not one of our strengths,” said one of our respondents, who asked to remain anonymous. “Market research for northern Haiti?” quipped Peter Haas of **AIDG**. “Sorry mates, there is none.” To date, very few entrepreneurs work with marketing or market research agencies, though **Jumpstart** was one. Another was **Dialogue in the Dark**, where Andreas Heinecke noted that, “we went through an intensive **Bain** study to be ready for take-off.”

Other pointers on market research options included the following: “We all must struggle to harvest useful knowledge from the flood of information today—from magazines, internet-based newsletters, research studies and government reports,” said Mike Eckhart of **ACORE**. Other useful sources identified include “the **Monitor Group, New Profit Inc., Bridgespan** and other key advisors” (**BELL**), “industry reports” (**Health Care Without Harm**), “in-house research capability and work with think-tanks” (**Independence Care Systems**), “foundation social impact data, to help develop our high-transparency bank” (**Urban Logic**), “World Bank reports” (**Root Capital**), “government surveys” and “national statistics” (**Responde**), “customers” (**First Book**), “listserves” (**Nuestras Raices**), “mainly the Internet” (**Freeplay Foundation**), “research carried out by NGOs” (**Honey Care Africa**), and “word of mouth” (**Evergreen**).

The closer the entrepreneurs are to viable business models, the greater their appetite for market research. In particular there is an appetite for targeted, reliable, affordable research—though in many cases the likelihood for many respondents is that free sources will win out over paid-for services for some time to come. When we asked entrepreneurs what questions they would want asked if market research capacity were to be available, the replies were predictably broad ranging, spotlighting the potential of well-targeted market intelligence to help them frame their thinking, priorities and business cases:

- A focused analysis of fair trade and organic product market trends and opportunities.²¹
- How will climate change investments be impacted by the financial crisis?²²
- How do Chinese companies and multinationals operating in China apply CSR programs in China?²³
- What do companies most want in partnerships with social entrepreneurs?²⁴
- Where are there untapped sources of funding?²⁵



The new economic reality will force many actors to upgrade—and in many cases reboot—the business case arguments they use to sell what they do. Anyone

wanting persuasive input to their business case would be well advised to take a look at the work of **Sustainable Asset Management (SAM)**, particularly its **2009 Sustainability Yearbook**.²⁶ Among the trailblazers rebooting health sector business cases generally are the **Aravind Eye Care System**, **Health Care Without Harm**, the Institute for One World Health and, perhaps most strikingly, **GSK**. In the area of sustainability policy, the **World Resources Institute (WRI)** and the **World Business Council for Sustainable Development (WBCSD)** stand out. In the energy sector, the Phoenix 50 includes **AMEE**, **Climate Change Capital** and, most powerfully, **GE's Ecomagination Initiative**. In the automotive sector, we spotlight **BYD Auto**, which is morphing from a battery-maker to a producer of electric cars. In the wider field of innovation, we see **Innocentive** as a pioneer, with its focus on “sustainable breakthrough innovation”.

“We have to make sure that we have the greatest impact at the lowest cost and do an increasingly good job at showing how lives are being changed in a sustained way.”

Andrea Coleman
Riders for Health

Entrepreneurs are increasingly aware of the need to build ‘ecosystems of change’—and to mobilize strategic alliances in pursuit of ‘pathways to scale’.

It takes an ecosystem approach to drive true system change. Once basic survival is ensured, the focus of most respondents and interviewees turns to questions of scaling their impact. Building critical mass through partnerships and alliances with other sectors is seen as a critical condition for moving up to Stages 4 (Ecosystem) and, ultimately, Stage 5 (Economy) (Figure 2.1, page 14–15). This is the focus of our ‘Pathways to Scale’ work, which has found that the key aspirations of entrepreneurs currently moving towards Stage 4 include:

- Consolidating their business models and financing mechanisms (**Solar Aid**).
- Evolving alliances to increase their access channels and market share (**Global Footprint Network**).
- Improving market regulation through standards and better governance (**Roundtable on Sustainable Biofuels**).
- Assembling the infrastructures required to bring their solutions to scale (**Movimento Nacional dos Catadores de Materiais Recicláveis**).
- Lobbying governments for new market-shaping rules that get the incentives right (**CERES Investor Network on Climate Risk**).

Most of the entrepreneurs interviewed see their initiatives and solutions as located somewhere between Stage 2 (Experiment) and Stage 3 (Enterprise). The growing concerns about survival shown by respondents underscore the difficulties of sustaining enterprises in Stages 2 and 3, let alone moving on to Stage 4. Those we polled reported that their highest priority is to find ways to influence the private sector. But also seen as ‘very important’ is their ability to influence regulation and public support by engaging with national governments and by mobilizing grassroots and broader cultural change through engagement with the media in its many forms.

As the Stage 4 opportunity space opens out in the form of new markets, there has been growing interest in its development from financial institutions, with **Generation Investment Management** and venture capital pioneers **Kleiner Perkins Caufield & Byers** among the Phoenix 50—and **Khosla Ventures** among those nominated. The still-emerging **Global Impact Investing Network (GIIN)** is a gamble in the Phoenix 50 listing, but significant because it is catalyzing new ways of blending private and philanthropic capital to help social and environmental entrepreneurs. Other 2009 Phoenix 50 organizations that demonstrate the importance of building ecosystems include **Aflatoun**, the **C40** initiative and the **Marine Stewardship Council**.

It is striking that social entrepreneurs evaluate the ‘financial community’ as way below other sectors in terms of current importance in their work. Generally this is because entrepreneurs address areas of market failure, where investors tend to venture timidly, if at all. Cleantech entrepreneurs are an exception here, because they address markets that are closer to market take-off. For example, Shai Agassi’s **Better Place** aims to create the system conditions for the roll-out of electric vehicles on a large scale—and is unusual among the entrepreneurs covered here in that they are venture-funded. The interface between entrepreneurs and financial markets clearly merits further work.

Although international government agencies scored lowest in terms of their significance for our entrepreneurs, they too can play a key role. Consider India’s Solar Loan Programme, led by the **United Nations Environment Programme (UNEP)** from 2003 to 2007, which created the necessary conditions for Indian banks to support the scaling up of lending for solar home systems.²⁷ That said, the low score achieved by this sector suggests that the relevant institutions and agencies need to rethink their role if they are to spur the rise of a truly global Phoenix Economy.



Getting to Stage 3 in our 5-stage model of 'Pathways to Scale' (page 15) is never easy, but is a good deal simpler than the convening, building and managing of

strategic alliances and partnerships necessary to operate effectively at Stage 4. The Phoenix 50 organizations—and many others covered in these pages—are trying to build ecosystems for change.

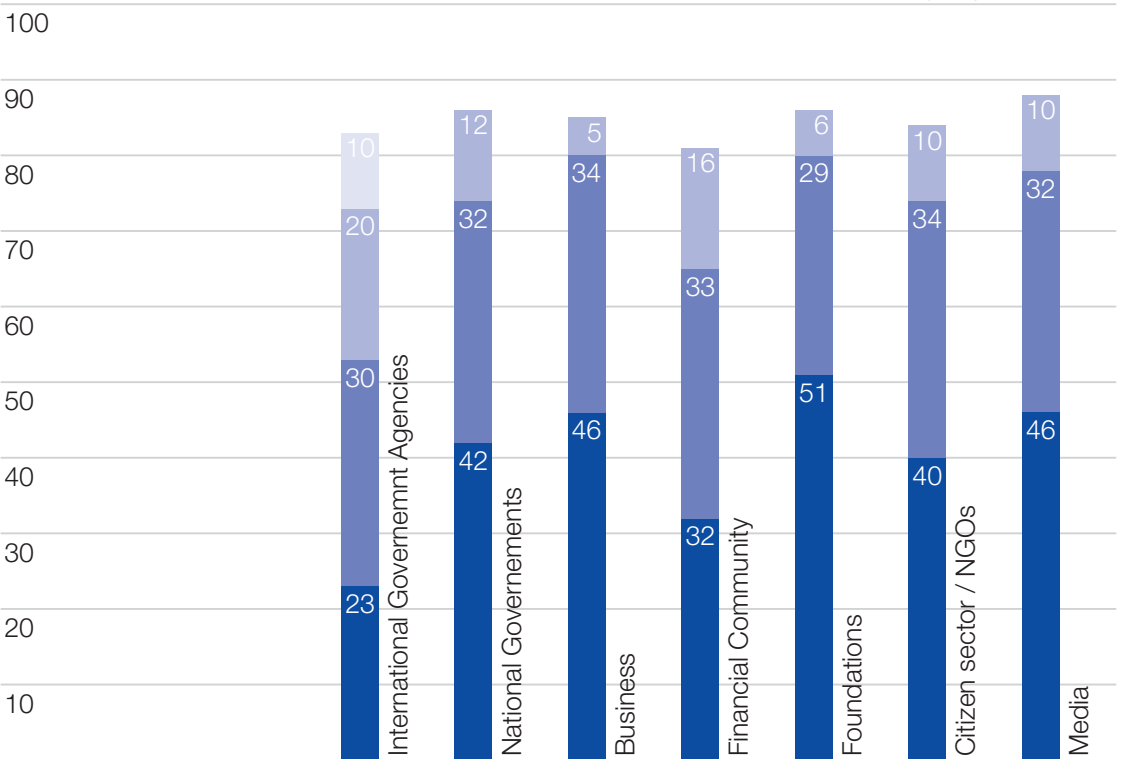
Among those spotlighted in the Phoenix 50 are **Aflatoun**, the **Cleantech Group**, **Interpeace**, the **Marine Stewardship Council**, **Movimento Nacional dos Catadores de Materiais Recicláveis** and **Novo Nordisk** with its support for the **Oxford Health Alliance**. Many are working on technologies and business models that open out the landscape of opportunity for others, including **CellBazaar**, **MaRS** and **Virgance**. The relevant skills will need honing, but the role of market-shapers like governments, stock exchanges, financial institutions and business can only become increasingly important.

Figure 3.5

Stakeholder importance

What sectors do you need to work with to scale your impact?
Number of votes

Irrelevant
Not very important
Important
Very important



Entrepreneurs see an urgent need to converge bottom-up with top-down approaches—and to link micro-level solutions with macro-strategies.

If any one characteristic stands out in the work and achievements of the most celebrated social entrepreneurs in the developing world, it is their focus on micro-models: micro-finance, micro-insurance, micro-energy generation and so on. When asked for their prescriptions for future progress in their fields of interest, most social entrepreneurs working in these areas continue to emphasize the micro, often assuming—or stating—that the best way to the desired macro outcome of system change is by the aggregation of a growing number of bottom-up initiatives.

Others see things differently. “Macro solutions are key,” said one of our **Net Impact** respondents. “How else,” she asked, “are we going to replace the 200-plus million cars in the USA with non-carbon-based transportation?” Many of the social and environmental entrepreneurs we interviewed are increasingly aware of the need for macro-level support for their work. Indeed, many of our survey respondents were extremely enthusiastic about the promise of the **Obama Presidency**, precisely because of its aim to support social and environmental entrepreneurship by building the necessary macro-level policy and incentive structures.

Despite its enormous ecological footprint and its profound economic problems, the US was seen by many as well placed to help build the Phoenix Economy, “once (and if) the right incentive structures are put in place.” See pages 36–37 for our Phoenix Manifesto for governments.

Several of the pioneering Phoenix 50 organizations aim to bridge micro and macro levels of change. They include the **Cleantech Group**, which since 2002 has been a leading source of market intelligence in the cleantech sector and **Arup**, the global firm of designers, engineers, planners and business consultants that has been involved in the design and planning of eco-cities like Dongtan, Shanghai, China. More significantly, **Arup** Director, Peter Head, told us that the 1,000 people working on sustainable development issues in the firm are now helping direct new business development across the 9,000-person organization.

Another similar organization nominated was architect Norman Foster’s **Foster & Partners**, which is doing the master planning for the new eco-city of Masdar in the United Arab Emirates, designed to be both carbon neutral and zero waste. Increasingly, cities around the world are trying to work out how to bring their collective weight to bear on issues like climate change. This is the focus of the **C40** initiative, among others.

Exciting though such eco-cities are, many more people will live in the world's sprawling, noisome slums than are ever likely to live in new cities of any type. Over a billion people are thought to live in slums worldwide, a number that could double within a couple of decades, placing a massive premium on approaches and initiatives that offer hope of raising living and environmental standards in such areas.

Of the Phoenix 50 organizations, the most relevant here is **Himanshu Parikh Consulting Engineers**, in India. Using what they dub 'Slum Networking', they study the natural topography and drainage of slum areas to improve the environment and provide quality, gravity-based water supply, sanitation, storm drainage, roads and landscaping at costs lower than conventional solutions like public stand posts and community latrines. The various components of infrastructure are bundled, to cut the cost, integrated from micro to macro levels. "The Slum Networking concept has been tried in several cities of India such as Indore, Baroda, Ahmedabad, Bhopal and Mumbai," reports Himanshu Parikh, "directly transforming lives of about a million people."



No amount of micro-level innovation will flip the system to a new (macro) state. Significantly, the **Grameen Group, founded by Muhammad Yunus,**

is most closely associated with micro-scale solutions, but has constantly experimented with ways of scaling micro-level activities—and with partnerships designed to address the macro-level challenge. Yunus even considered running for the highest political office. Venture-funded **Better Place straddles the macro-micro divide, as do venture capitalists **Kleiner Perkins Caufield & Byers (KPCB)** represented by 'greentech' champion **John Doerr**. Among Phoenix 50 corporations selected on the basis of their macro-micro strategies are architects and planners **Arup**, search engine pioneers **Google** and logistics giant **TNT**. But even solutions developed by tiny enterprises can vault to the point of addressing macro issues, like **Apopo** with its 'sniffer rats' hunting out landmines, helping to underscore the significance of the multi-dimensional security agenda. Our market pioneers increasingly recognize the need to sniff out opportunities for change at micro, meso and macro scales.**

Question: do you see anything good about the economic downturn?

"[We could see a] shift in societal values."

Bart Weetjens

Apopo International

Entrepreneurs see the roles of government as critical, but foresee an accelerating need for 'government-as-unusual'.

One of the entrepreneurs we came across during the project was Patri Friedman, who wants to create floating island nations free from government interference. "Government is an inefficient industry because it has an insane barrier to entry," he explained. To replace an incumbent government you either have to win an election (expensive) or foment a revolution (complicated).²⁹ By contrast, the majority of our respondents see government as a necessary growth industry.

Most spoke of the role of government in terms of creating the right incentives for systemic change. Many identified the unique situation in the US, where President Obama and his administration have an opportunity to advance entrepreneurship from grassroots levels, by providing the required infrastructure and building partnerships with international organizations committed to similar goals.

But there was real concern that governments were responding to the economic discontinuity by designing 'half-baked' programs that threaten to make things worse in the long term. "Because financial managers and policy-makers are largely resource-illiterate, the current financial crisis is leading to rather disastrous recovery plans," argued Mathis Wackernagel of the **Global Footprint Network**. "Anything non-green is building traps and will need to be de-constructed within a couple of decades."

Many entrepreneurs and intrapreneurs are sceptical about the efforts of governments to achieve really significant change and suspicious of the slow pace of national and international bureaucracies in responding. Respondents—who are often addressing areas of market and government failure—perceived the influence of international organisations as typically lower than other actors. Several interviewees noted how little has been achieved so far in the international climate negotiations, with growing concerns about the likelihood of a 'real climate deal' at the Copenhagen climate summit later this year. Also mentioned was the failure to create a suitable, functional global governance architecture.

More positively, respondents see the design of 'green new deals' as offering the potential to re-direct government attention. Among other things, President Obama picked people on the basis of talent rather than ideology, and the US Administration's American Recovery and Reinvestment Act and 'New Energy for America' program aim to jumpstart the economy in greener ways through:

- The creation of five million new jobs by strategically investing \$150 billion over the next ten years to catalyze private efforts to build a clean energy future;
- Initiatives that within 10 years aim to save more oil than the US currently import from the Middle East and Venezuela combined;
- Plans to get 1 million plug-in hybrid cars on the road by 2015;
- Investment to ensure that 10% of US electricity comes from renewable sources by 2012, and 25 percent by 2025; and
- The implementation of a US economy-wide cap-and-trade program to reduce greenhouse gas emissions 80 percent by 2050.³⁰

California was also popular in our nomination process, despite its financial problems, because of the growing number of initiatives it has been taking to address issues like climate change—and the investment now being directed by California-based venture capital funds (like **Kleiner Perkins Caufield & Byers**) and technology companies (like **Google**) into areas like cleantech, renewable energy and the development of ‘smart grid’ technologies.

Several Phoenix 50 organizations are dedicated to shifting government thinking and policy on key issues, including **ACORE**, founded in 2001 to bring together leading proponents and innovators in all facets of the renewable energy sector to move renewable energy into the mainstream of America’s economy. **ACORE** started out small, but with an ambitious goal: to create a membership-based organization for the renewable energy community—and to give members a common platform for communicating and lobbying.

In interviews with entrepreneurs, strikingly, it was clear that what they want today is not old-style government. They insist on what we call ‘government-as-unusual’. They want political leaders, public sector agencies and policy-makers to create the frameworks, incentive structures and funding that will help innovators and entrepreneurs create and put in place the building blocks of a more sustainable, more equitable economic order. One line of thinking that could be helpful here is ‘choice architecture’, whereby governments—and businesses can make it easier for us all to make the right decisions, nudging us in the right direction.³¹



The nature, scale and effectiveness of government involvement will be critically important in determining the success of the Phoenix Economy. New alliances like

ACORE will be needed to steer policy in the direction of the Phoenix Economy. New networks of public sector actors are forming, like the C40 alliance of cities. The lead taken by the Obama Presidency is likely to be crucial, as will be the role of ‘test bed’ cities and regions, among them the State of California. Although currently financially troubled, California is likely to resume its role as a leading edge experimenter with Phoenix-type policies. And into all of this, catalytic trailblazers like the Global Footprint Network will play, among other things through their evolving relationship with another Phoenix 50 organization, the World Business Council for Sustainable Development (WBCSD).

“National governments should help create enabling ecosystems.”

R D Thulasiraj

Aravind Eye Care System

Here are some initiatives that our surveyed entrepreneurs want to see from leaders in government, business, finance and business education.



One recurrent problem in change processes is that emergent enterprises have a weaker voice in the relevant politics than vested interests—including incumbent industries and organizations. In what follows, we do not aim to speak for the entrepreneurs who responded to our surveys, but instead to spotlight some of the issues they raised for decision-makers and policy-makers.³²

Chris Elias of **PATH** summarized a widely held view among respondents: “It will be easier to scale the social enterprises you mention in the Agenda than to change the failed institutions that are the subject of the bailouts.” The central theme in this Phoenix Economy report, however, has been that entrepreneurial scale and institutional change go hand in hand; one can’t happen without the other. In this spirit we outline below a Phoenix ‘Manifesto’ for political leaders, a ‘Prospectus’ for business leaders and investors, and a ‘Syllabus’ for business educators.

“It will be easier to scale the social enterprises you mention in the Agenda than to change the failed institutions that are the subject of the bailouts.”

Chris Elias PATH

The Phoenix Syllabus
for Business Educators



As government leaders are required to save ailing parts of the economy at ever-increasing cost, entrepreneurs who are helping the Phoenix Economy take flight want to see much expanded support for enterprises that create new forms of value, new forms of employment and, ultimately, new landscapes of market opportunity. Among other things, they want to see governments:

Collaborate

More governments—and different levels of government—need to establish units and departments to provide effective interfaces between entrepreneurs and the government system, a process that has begun in the UK with the **National Endowment for Science, Technology & the Arts (NESTA)** and the **Office of the Third Sector**. As an example of what can be done, **NESTA**'s first Public Services Innovation Summit in 2009 explored how social enterprise can help government meet a growing range of public sector challenges. Similarly, **MaRS** in Canada is a private-public partnership designed to incubate and foster cross-sector collaboration for the development of new technologies in areas such as healthcare.

Redesign bailout packages

There is an opportunity—indeed an urgent need—to build social and environmental entrepreneurship into the growing number of bailout plans and New Deal packages. Here we welcome the work that the **United Nations Environment Programme (UNEP)** has been doing towards a 'Global Green New Deal' and the efforts of organizations like the **Cleantech Group** and **Green for All** to influence the often panicked politics around the bailouts.

Get the targets right

To ensure effectiveness and accountability, governments must set, publish, monitor and report on progress towards ambitious targets on key priority areas, such as climate change. They also need to establish the right policy frameworks—a key reason why the **Obama Presidency** made the 2009 Phoenix 50 so resoundingly.

Partnerships, once again, will be crucial to help governments to understand which targets to set. The **Global Footprint Network** is now working with governments around the world to build dashboards of metrics and management systems; and the governments of Ireland and the UK are working with **AMEE**, which calculates carbon footprints, enabling aggregated statistics to be reported.

Simplify regulatory requirements

Entrepreneurs protested the complexity of registering new organizations in several countries. In the US for example, there were calls for government to “federalize regulatory requirements relating to the social sector, as they have, in large part, for the private sector. For non-profits in the US there are separate filing requirements in each state and we have experienced similar complexities in Canada and beyond. All of the states are focused on the same information and issues—but each state has a slightly different set of requirements, including, separate filing fees and schedules of submissions. No-one objects to providing the information, but a simplified, unified set of requirements at the federal level would dramatically reduce the costs and strain of these duplicative systems. It would also increase transparency because the public could access information about social sector organizations in one location, rather than state by state.”

Redirect procurement

All levels of government can help to drive the transition by adapting their policies in areas like public purchasing, an approach that has been trialled by initiatives like **C40**. Buying green—or more broadly in ways that are 'future-friendly'—on a larger scale by aggregating purchasing inexorably drives market transformations. A growing number of examples exist, from police departments requesting the purchase of electric vehicles, to building standards being upgraded, and new green directives being integrated into public purchasing guidelines. Among organizations we are working with on this front is Paris-based **EcoVadis**, which is building a range of safety, health, environmental and human rights standards into supplier management software packages.

Refine market governance

Markets are social constructions. Sometimes they just happen, sometimes they are created by design. Public sector efforts are likely to be most effective where they learn from innovators creating a new generation of market governance rules and processes. Such players include the **Extractive Industry Transparency Initiative**; the **Forest Stewardship Council**; **Health Care Without Harm**; the **Roundtable on Sustainable Palm Oil** and the **Roundtable on Sustainable Biofuels**; and the **Marine Stewardship Council**.

Infrastructure design

Governments, at all levels, need to think beyond curative solutions and leverage the intelligence of entrepreneurs in the design of policies and interventions, from public health spending to city blueprints. This trend is illustrated by such examples as **Better Place** and the **World Resource Institute's EMBARQ**, both working closely with governments around the world on the design of sustainable transport policies and infrastructures. Elsewhere among the Phoenix 50, we spotlight new forms of urban design, particularly work under way on eco-cities at companies like **Arup**. But don't forget the sprawling slums where many more people live, an agenda informed by the extraordinary work of pioneers like Himanshu Parik.

Grow clusters

Governments have a critical role to play in creating the necessary clusters of social enterprise and support services. This is an area that several of our Phoenix 50 are pioneering, among them **MaRS** in Canada. It is also something that the **Singapore Economic Development Board (EDB)**, a funding partner of Volans, is working towards in the city-state. Interestingly, **EDB** has wider, regional ambitions—something that other government agencies could well emulate.

Culture change

It's never easy to achieve cultural change, but the world will inevitably undergo a series of cultural transformations in the wake of massive, discontinuous economic upheaval. Here the work of **Participant Media** (most notable for Al Gore's film *An Inconvenient Truth*) has been inspirational in its use of mainstream media and entertainment to raise awareness of critical societal concerns and encourage a positive paradigm shift in behaviours.

The success of **Celador Productions'** film, *Slumdog Millionaire*, with a growing number of public references to 'slumdog entrepreneurs', also suggests ways in which difficult social and environmental issues can be brought to a global audience—on a relative (to Hollywood) shoestring budget. Then there is Franny Armstrong's film *The Age of Stupid*, which demonstrates the emerging power of 'crowd-funding'.³³ Go **Team Stupid!** More government support needs to be directed towards such media enterprises and the wider media world, guided by the aspirational goal of **Ashoka**: to help make 'Everyone a changemaker'.

With a more specific remit, the work of the **Oxford Health Alliance** on building cultures of preventive health to slow the accelerating global wave of chronic disease has not yet attracted enough support from governments, but nonetheless signals a possible way forward—as do the approaches of such Phoenix 50 organizations as the **Global Footprint Network** and **Virgance**—which exploits the power of social networks to drive change.

When it comes to business, financial institutions and business schools, the entrepreneurs we polled want business to:

Partner

There is a clear and growing appetite among our trailblazers for new forms of partnership with business, with **Danone** seen as a true pioneer with its **Grameen-Danone Foods** in Bangladesh. This will involve funding relationships, of course, but leading entrepreneurs are also interested in gaining access to highly skilled, high potential individuals in business. **Accenture Development Partners (ADP)** is seen as a leading model here. Other major service providers are moving in similar directions, as in the case of the **PricewaterhouseCoopers** replication- and scaling-focused partnership with Cambodia's **Hagar**, designed to help the latter expand its operations across Asia. To these players, such ventures are not simply a matter of talent transfers but—in the longer term—explorations of tomorrow's social and market trends.

Build market intelligence

Market intelligence is one thing, intelligent markets quite another. Organizations like the **Carbon Disclosure Project (CDP)** and the **Global Reporting Initiative (GRI)** are critically important here. Our respondents tend to have disparate needs in terms of market research, but as they grow they know they will need better market intelligence. This is an area where new forms of partnership could be forged between constellations of entrepreneurs and market research providers, something the **London Accord** has been working on.³⁴ Alongside governments, business leaders also have a role to play in designing market mechanisms that ensure greater system intelligence—and, ultimately, wisdom.

Help scale solutions

As they move from prototypes to proven business models, entrepreneurs need help in thinking through how to consolidate, replicate and scale their solutions. Business can help them think from the outset, as **Novo Nordisk** did with the **Oxford Health Alliance** and **TNT** has been doing with its crisis response logistics and related partnerships. The fact that the **Oxford Health Alliance** has struggled to attract later rounds of funding even where the benefits are blindingly clear underscores the truth in one of our favorite one-liners, “The impossible takes a little longer.”

Think around corners

Again, easier said than done, but business federations need to open up to new thinking, as we see with the **World Business Council for Sustainable Development's** growing interest in social entrepreneurs and their work with the **Global Footprint Network** to introduce mainstream corporate business to integrated footprint metrics. Among other companies listed, **Google** is leading the way in trying to reframe and rethink major challenges around climate change and renewable energy—with its RE<C (Renewable Energy cheaper than Coal) formula. As one of our respondents suggested, companies might improve their capacity to engage and understand the wider world by creating ‘social entrepreneurs in residence’ programs.

Tim Smit of **The Eden Project** says “The Phoenix Economy is fine, as far as it goes. But we need to dig deeper into the question of how the pre-Phoenix world can serve the post-Phoenix world. For example, the skills of the financier and the lawyer have never been more needed, as long as the motivation is the public good. How do we re-purpose such professions? And no-one, to my knowledge, is doing any serious work on social enterprise business models—which means that the territory is being dominated by people who see the opportunity as a glorified job creation programme, rather than as an amazing opportunity to redefine markets and corporate structures.”

Take the lead and lobby for change

Business has an increasing awareness of the risks that lie ahead and is quickly developing an interest in supporting change. It has a central role to play in building understanding of the need for new models and frameworks—and the related market opportunities. The work of the **CERES** Investor Network on Climate Risk underscores the potential. In January 2009, this group of 44 investors, managing over \$1.7 trillion in assets, called on US Congressional leaders to include significant funding for energy efficiency, clean energy and clean transportation in the economic stimulus package being debated in Congress.³⁵ The **US Climate Action Partnership** is another example, as is the UK's **Corporate Leaders Group on Climate Change**. Other major players experimenting in related areas include **ACORE** and **Goldman Sachs**, with its 'Sustain' initiative.³⁶

Our entrepreneurs also say that they want financial institutions to:

Invest in Phoenix pioneers

An obvious one this, but the stinger is that respondents also want to see the banks get back to sustainable models of lending and then to maintain and build credit lines for social enterprises, following the lead of banks like **Shorebank** and **Triodos**.

Another model is the **United Nations Environment Programme's** 'Indian Solar Loan Programme', which generated a 15-fold increase in the purchasing of home solar systems in south India, by supporting mainstream banks in lowering the costs to customers of financing solar home systems. In Tunisia, a similar **UNEP** program has led to over 20,000 families buying solar water heaters—and to Tunisian banks providing loans totaling \$12 million. This has doubled the number of solar water heater suppliers, while the number of installers quadrupled over four years.

Adopt new metrics

There is a need to support and adopt investment metrics that align financial investment more closely with long-term societal goals, following leaders such as **Generation Investment Management's** model of equity management and the potential of the **Global Impact Investing Network (GIIN)**, which aims to pull together blends of private, public and philanthropic funding seeking to mainstream social impact investment.

“The Phoenix Economy is fine, as far as it goes. But we need to dig deeper into the question of how the pre-Phoenix world can serve the post-Phoenix world.”

Tim Smit

The Eden Project

Entrepreneurs see business schools and educators as important drivers of change and want them to:

Rethink the curriculum and research agenda

The growing impact of the economic discontinuity suggests that it is time to question the very principles on which business educators base their curricula, where areas like financial modeling, strategy and marketing, show little evidence of the integration of ethical, social and environmental considerations.

Mainstream social innovation

Most leading business schools have started to look at social entrepreneurship, but this has tended to be a marginal activity, with teaching and research kept in 'social' silos within the schools. Now is the time to bring this teaching and research agenda closer to mainstream business education, looking beyond social enterprises to what Volans calls the 'business of social innovation'.

Reboot case studies

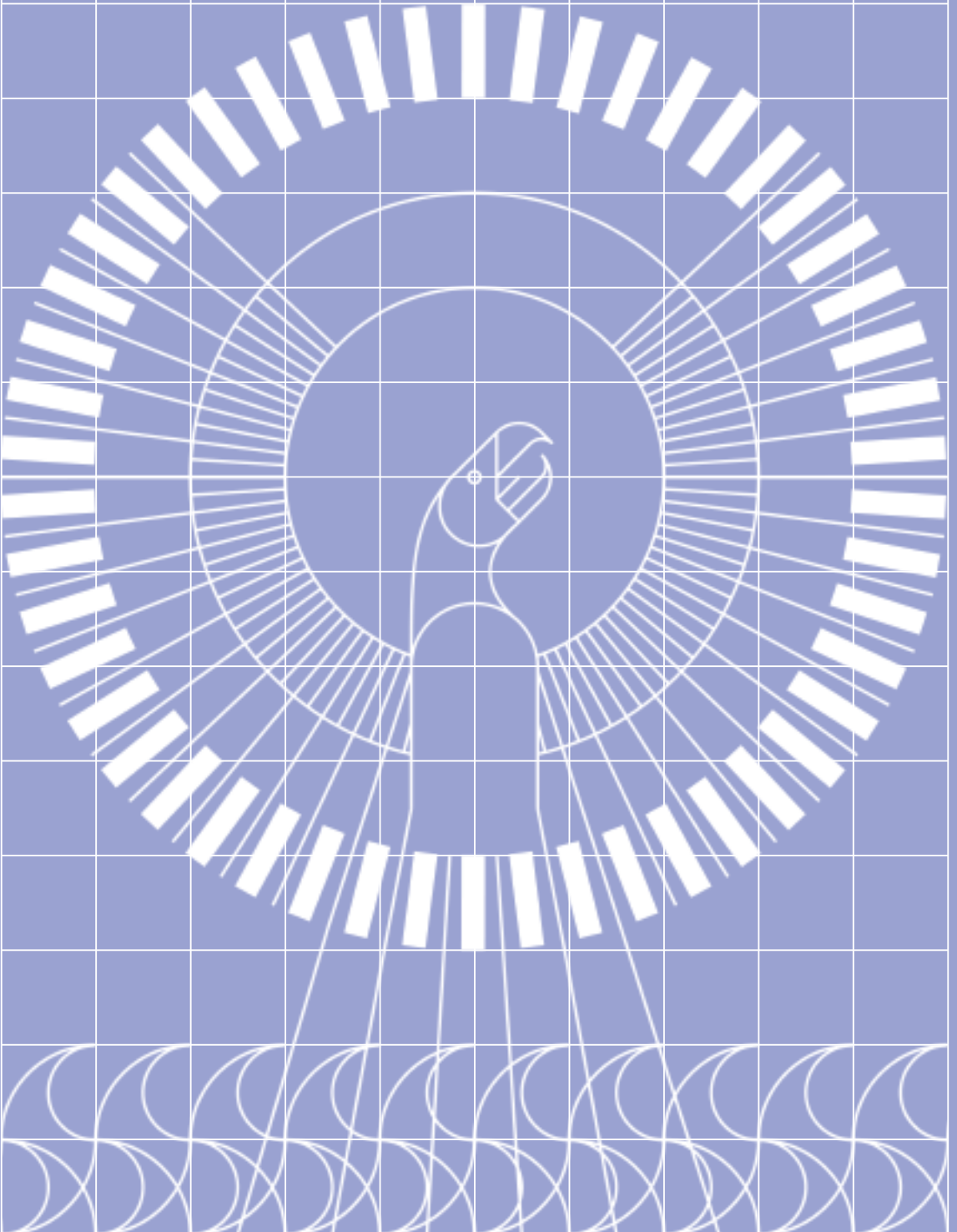
There is a need to develop and adopt new metrics in business research and education (think triple bottom line or blended value). Universities and research institutions have an important role to play here, especially through the development of case studies with a focus on emerging Phoenix models.

The coverage of **Aravind Eye Care Hospitals** in a recent **Harvard Business School** case study should be emulated. New 'living' case studies need to be developed, which explore different types of solutions across a broader spectrum of organizational and sectoral models. One key area of focus should be on strategies, alliances and pathways to scale. The Phoenix 50 list may provide a useful provocation.

Unleash students

Student groups focused on social entrepreneurship have been remarkably successful and active in places like the **Haas Business School** at Berkeley, the **Fuqua School of Management** at **Duke University**, **Harvard University's Kennedy School of Government**, **INSEAD** and the **Skoll Centre for Social Entrepreneurship** at **Oxford University**. The same is true for a growing number of emerging economy and developing country business schools.

The responses from our panel of **Net Impact** members underscore the huge appetite among young people to get involved in initiatives that help make the world a better place. Interestingly, **Harvard Business School** has launched a Social Entrepreneurship Fellowship that grants a student \$25,000 to start a social enterprise upon graduation. In many cases all business educators will need to do is unleash this pent-up interest and talent. In the process, they also need to think how they can best enable the next generation of decision-takers, policy-makers and managers to get the Phoenix Economy airborne.



Here are the enterprises, companies, financial institutions and government agencies that impressed us with their contributions to scaling solutions that best align with Phoenix Economy values.

Figure 5.1

From Nominations to the Phoenix 50



“The future is already here,” science fiction’s William Gibson noted, “it’s just unevenly distributed.” Also unevenly distributed is the early evidence of an emerging Phoenix Economy. Yes, there is now a *Green Rich List*,³⁷ but what about pioneers who are creating value in multiple dimensions? Where in the world should we look for evidence that, as the World Social Forum³⁸ puts it, another, better world is possible? This first round of the Phoenix 50 is drawn from a first-cut selection of pioneering organizations that are modelling at least some aspects of the Phoenix agenda. The Phoenix 50 are rare birds in that they meet some or all of the following criteria:

- Pioneer the business of social innovation.
- Create value blends across the triple bottom line agenda.
- Operate globally, regardless of size.
- Evolve their networks as ‘possibility factories.’
- Offer beacons of hope in a darkening landscape.
- Aim, ultimately, to sift paradigms, catalyzing systemic change.

Our aim in what follows is not to pick organizations guaranteed to survive the discontinuity and the intense period of transformation that it heralds. As *The Phoenix Economy* headed for the printers, **General Electric** signaled the severity of the downturn by slashing its dividend for the first time since 1938. Many of the organizations we list will run into major major problems in the coming years—and some will fail. In periods of intense experimentation, the failure rate tends to go off the curve. Recall Thomas Edison’s “Now I know 10,000 things that don’t work” comment on his way to success with electric light-bulbs. Rather, the intent is to spotlight innovations and market leaders that seem to us aligned with desired directions of change—and particularly those that are either in—or moving into—higher stages of the 5-stage ‘Pathways to Scale’ model outlined on pages 14–15.

For nominations of potential Phoenix 50 organizations, we polled several hundred entrepreneurs, members of the **SustainAbility** Faculty and the Volans Ecosystem, and a panel of **Net Impact** members. A total of 610 total nominations and 427 unique nominations were received, subsequently boiled down to 166 nominations—at which point a small advisory panel picked the finalists.³⁹ We make no claims to statistical validity. But as the panel debated the issues and the nominees, the final short-list emerged fairly quickly—and with a remarkable degree of consensus. This consensus will now be tested as the report is circulated.

Inevitably, both Volans and **SustainAbility** team members have worked with some of the organizations nominated and selected. Potential conflicts of interest were declared during the process.

The selection criteria were kept relatively simple, following consultation across our team and networks. On the basis of advice received, we came down to just six criteria. The hard criteria: (1) Does the organization have an innovative business model, moving beyond Stages 1–3 of the Volans 5-stage ‘Pathways to Scale’ model? (2) Is it building a Stage 4 ‘ecosystem’ in interesting ways? And (3) is it involved in developing innovative public policy approaches that could help drive the shift to Stage 5?

The soft criteria that also influenced the final selection reflected an interest in balancing the organizational type (not-for-profit, hybrid or for-profit), the geographic spread and representation, and the type of economic, social or environmental divides addressed.⁴⁰ For further details on how the Phoenix Program is evolving please contact us at phoenix@volans.com



Aflatoun

2005 The Netherlands

www.aflatoun.org

If Phoenix forms of capitalism are going to work, children need to have access to quality education that will allow them to shape their futures. Aflatoun is dedicated to reducing poverty by helping children develop the skills to be socially and financially empowered.

AMEE

2007 USA

www.amee.com

The old adage that what you can't measure you can't manage applies directly to the Phoenix Economy. AMEE aims to map, measure and track all the energy data on Earth. This includes aggregating every emission factor and methodology related to CO2 and Energy Assessments (individuals, businesses, buildings, products, supply chains, countries, etc.), and all the consumption data (fuel, water, waste, quantitative and qualitative factors).

American Council on Renewable Energy (ACORE)

2001 USA

www.acore.org

The Phoenix Economy must have voices that will promote its development and the adoption of Phoenix models by the mainstream. ACORE is a multi-stakeholder membership driven organisation that aims to bring renewable energy into the mainstream of America's economy and lifestyle.

Apopo

1998 Belgium

www.apopo.org

Lateral thinking will be a key factor shaping the evolution of the Phoenix Economy. Apopo uses 'sniffer rats' to detect and uncover landmines, the rats remaining unharmed because they are light enough not to detonate the mines.

Aravind Eye Care System

1976 India

www.aravind.org

New models of value creation will be central. Aravind Eye Care is the largest and most productive eye care facility in the world. Using a hybrid business model, they treat over 1.4 million patients a year, two-thirds of them for free.

Arup

1946 UK

www.arup.com

Now that we are an urban species, the Phoenix Economy will require smart urban design, planning and management. Arup is a design company with a range of technical, design, creative and management skills to achieve solutions to complex design challenges.

Ashoka

1980 USA

www.ashoka.org

How do we switch on the world to the need for change? Bill Drayton and Ashoka are the pioneers of the social entrepreneurship movement and are evolving a series of programmes that are working towards the vision of a world where 'Everyone is a changemaker'.™

Better Place

2007 USA

www.betterplace.com

Electric forms of transport and mobility will be crucial in the transition to sustainability. Founded by Shai Agassi, Better Place is working towards building electric car networks in countries like Australia, Canada, Denmark, Israel and the USA. Its goal is sustainable transportation, global energy independence and freedom from oil.

Business and Human Rights Resource Centre

2000 UK

www.business-humanrights.org

There are many organisations dedicated to promoting human rights, but very few that focus on the interface with business—and none that do it as well as The Business & Human Rights Resource Centre. It is the leading player helping grow a whole generation of organizations and networks which promote human rights issues within global business. Their work covers over 4,000 companies in more than 180 countries.

BYD

1995 China

www.byd.com

Phoenix Economy organisations are located all over the world. BYD is a major Chinese battery manufacturer that has now evolved to become a leading business in the nascent electric mobility market in China, manufacturing and selling electric cars.

C40

2005 USA

www.c40cities.org

In an increasingly urban world, cities will need to work together to create a global Phoenix Economy. They have a central role to play in tackling climate change, particularly as cities bear a disproportional responsibility for causing it. C40 is a group of the world's largest cities committed to tackling climate change in as part of the Clinton Climate Initiative, engaging with the central responsibility and role of cities for addressing climate change and low-carbon energy systems.

CellBazaar

2006 Bangladesh

www.cellbazaar.com

Cell phones are used for purposes beyond communication and the technology is increasingly being applied to create a better, more equitable world. CellBazaar is a service from Grameenphone that allows people to buy or sell products and services ranging from rice, bananas, used watches, and thousands of other items, directly to others in their localities using mobile communications technology.

CERES

1989 USA

www.ceres.org

New market rules will be essential. Ceres is a national network of investors, environmental organizations and other public interest groups working with companies and investors to address sustainability challenges such as global climate change. Its mission is to integrate sustainability into capital markets for the health of the planet and its people.

Cleantech Group

2002 USA

www.cleantech.com

Phoenix sectors, such as cleantech, are building critical mass and finding strength in a shared voice. The Cleantech Group pioneered clean technology as an investment category and played an influential role in fostering its growth information products, world-class research and the highest calibre industry connections.

Climate Change Capital

2003 UK

www.climatechange-capital.com

For quite some time, carbon will remain a central element of the Phoenix Economy. Controversial at times, Climate Change Capital is an investment management firm specialising and advocating for new opportunities generated by the global transition to the low carbon economy.

E+Co

1994 USA

www.eandco.org

Energy is the basis of a modern life, but is very hard to access in many parts of the world. E+Co invests services and capital in high-impact, small and growing clean energy businesses in developing countries, addressing energy transitions in the 'missing middle', businesses that are too large to benefit from micro-finance but too small to access mainstream financial services.

Econcern

1984 The Netherlands

www.econcern.com

The sustainable energy space holds tremendous opportunity. Econcern continuously introduces efficient, integrated concepts and systems that can drive a sustainable energy transition. The Econcern team believes that the key to such a transition is market-driven innovation.

Generation Investment Management

2004 UK and USA

www.generationim.com

Few people have done more to champion a sustainable future than Al Gore and David Blood. Generation Investment Management LLP, co-founded by Al Gore and David Blood, come into the mainstream equity management space with the idea that a company's returns over the long term will be largely determined by its management of sustainability issues. By integrating sustainability issues with traditional analysis, Generation aims to deliver superior investment returns to their clients.

General Electric's Ecomagination

2005 USA

<http://ge.ecomagination.com>

Incumbent companies will need to transform themselves if they are going to find a way of participating in the Phoenix Economy. GE is one of the biggest mainstream companies playing into future markets. It is one of the largest players in the wind power industry, and has business units developing environment-friendly products such as hybrid locomotives, desalination and water reuse solutions, and photovoltaic cells. Ecomagination illustrates a large corporation's sustainable business strategy.

Global Impact Investing Network (GIIN)

2008 USA

www.qk18ad7x79.web.aplus.net

A new initiative focused on leveraging the role of investment in supporting social and environmental businesses, the Global Impact Investing Network (GIIN) brings together investors and intermediaries who put capital to work at scale to generate social and environmental value in addition to financial return.

Global Footprint Network (GFN)

2003 USA

www.footprintnetwork.org

The Phoenix Economy will only work if there are new ways of measuring progress. Global Footprint Network believes that an essential step in creating a one-planet future is measuring human impact on the Earth, and aims to accelerate the use of Ecological Footprint metrics—a resource accounting tool that measures how much nature we have, how much we use, and who uses what.

Good Energy

1999 UK

www.goodenergy.co.uk

Empowering energy buyers to make decisions about where their energy comes from, Good Energy is the only 100% pure renewable electricity supplier in the UK. It allows consumers to support clean electricity, while developing systems to ensure the constant reliability of supplies.

Google.org

1998 USA

www.google.org

Google is best known as the world's most successful search engine, but is included in the Phoenix 50 because of the multiple initiatives running under its philanthropic arm, Google.org. This leverages Google's capacity for innovation to confront the climate crisis. Initiatives include developing utility-scale renewable energy that is cheaper than coal (RE<C initiative) and accelerating the commercialization of plug-in vehicles through the RechargeIT initiative.

Grameen Group

1976 Bangladesh

www.grameen-info.org

Originally three different parts of the Grameen Group made it onto the Phoenix 50 list—an organisation that is obviously well known and celebrated for its early Phoenix thinking. Grameen Group and Muhammad Yunus are pioneers of microfinance and a whole generation of initiatives and organizations that have subsequently used the Grameen Bank as a model platform to branch out other services. These include Grameen Shakti for the provision of clean rural energy and the co-venture Grameen Danone Foods.

Green for All

2007 USA

www.greenforall.org

Achieving the Phoenix Economy will require new forms of employment and reskilling. Green For All advocates for local, state and federal commitment to 'green' jobs creation, skills training, and entrepreneurial opportunities in the emerging green economy, especially for people from disadvantaged communities. Green For All is demonstrating that economic development and poverty alleviation are not trade-offs against a green economy, but can be synergistically tackled together.

GlaxoSmithKline (GSK)

2000 UK

www.gsk.com

Access will need to be provided to drugs, energy and water at affordable prices if the Phoenix future is to become a reality. In February 2009, GSK announced breakthrough commitments to developing healthcare and medicine provisions in developing countries; a future-looking business strategy that aims to influence the rest of the industry.

Health Care Without Harm

1996 USA

www.noharm.org

One way of driving positive change is to work with existing sectors and help them prepare for the Phoenix transition. Health Care Without Harm is a global coalition of 473 organizations in more than 50 countries, bridging issues of health and environment, by working to reduce the pollution in the hospitals and the wider healthcare sector.

Himanshu Parikh Consulting Engineers

1987 India

www.changemakers.net/en-us/node/6722

In most mega-cities around the world slums are an ‘invisible’ problem, with over a billion people living in them today. If the Phoenix Economy is to succeed, the people who live in these areas must be given help in finding their feet. Himanshu Parikh is developing Slum Networking solutions, providing infrastructure solutions to slums based on the correlation between slums and the natural riverine paths of cities.

Innocentive

2001 USA

www.innocentive.com

Collaborative problem solving will develop some of the best solutions. Innocentive is a global, online marketplace where organizations in need of breakthrough ideas—such as companies, academic institutions, public sector, and non-profit organizations—can utilize a global network of over 160,000 of the world’s brightest and committed problem solvers.

Institute for One World Health

2000 USA

www.oneworldhealth.org

Access to medicine will be a crucial challenge. One World Health was the first non-profit pharmaceutical company in the United States, and is advancing global health by developing effective and affordable medicines for infectious diseases that affect people in the developing world.

Interpeace

1994 Switzerland

www.interpeace.org

War is a feature of every century, but the stakes are getting progressively higher. Interpeace is an international peace-building organization that helps divided and conflicted societies to build sustainable peace processes. It focuses on connecting leaders and decision-making spaces, addressing critical links between the global security agenda and the wellbeing of societies.

J Craig Venter Institute

2006 USA

www.jcvi.org

Every new economy is powerfully shaped by scientists who experiment and explore the make-up of our natural world. The J. Craig Venter Institute is a large multidisciplinary genomic-focused organisation seeking solutions to the world’s greatest challenges. Recent projects have included the publication of the first diploid human genome and a global ocean sampling expedition, which uncovered more than six million new genes and thousands of new protein families from organisms found in sea water.

Kleiner Perkins Caufield & Byers

1972 USA

www.kpcb.com

Future-oriented venture capital firms are investing in many Phoenix enterprises. Kleiner Perkins Caufield & Byers is one of the biggest venture capital firms in the world, with a track record of backing some of the most successful companies like Google, Amazon and Sun Microsystems. Today they have become a leading example of how venture capital firms can play a role in advancing a green energy revolution, and contribute to shape a new, greener economy.

Marine Stewardship Council (MSC)

1997 UK

www.msc.org

Fish provides a healthy, renewable food source, and for some it’s essential for survival. As the world’s population increases so does pressure on fishery resources. MSC is the world’s leading certification and eco-labelling program seeking to steer the massive global fishery crisis towards a sustainable path. Among prominent partnerships it is working with Wal-Mart, which has committed to source 100% of its fresh seafood products from MSC-certified sources by 2012.

MaRS

2000 Canada

www.marsdd.com

Collaboration can help expedite the development and commercialization of new ideas. MaRS is a non-profit innovation centre connecting science, technology and social entrepreneurs with business skills, networks and capital to stimulate innovation and accelerate the creation and growth of successful Canadian enterprises.

Mothers2Mothers

2001 South Africa

www.m2m.org

Future generations (and mothers) are most vulnerable at the time of birth. Mothers2Mothers is a grassroots program supporting under-resourced healthcare systems, which trains and employs new mothers with HIV/AIDS to provide education and support to their peers, empowering them to access lifesaving treatment for themselves and their newborns.

Movimento Nacional dos Catadores de Materiais Recicláveis (MNCR)

1992 Brazil

www.mnrcr.org.br

Social justice and equality is a core principle in the Phoenix Economy. The MNCR is a nation-wide social movement for street waste-recyclers (catadores), which seeks the social and economic emancipation of Catadores through direct action, influencing public policy and partnering with the private sector in innovative ways.

MyC4

2004 Denmark

www.myc4.com

The Phoenix Economy will be driven by a global increase in entrepreneurial activity. To support the growth of these new enterprises there are a growing number of micro-loan websites, which provide funding to entrepreneurs. MyC4 is a peer-to-peer online marketplace that connects people around the world with African entrepreneurs who are looking for capital to develop their small businesses.

Novo Nordisk and the Oxford Health Alliance

2003 (OHA only) Denmark and UK
www.oxha.org

The Phoenix Economy involves thinking through your strategy in broad, global terms. Although it is counter-intuitive for a pharmaceutical company to invest in research that would, if successful, cut demand for its products, Novo Nordisk has played a key role in evolving the Oxford Health Alliance, which aims to prevent chronic diseases—including diabetes, for which Novo produces a treatment, insulin. The OHA enables experts and activist from different backgrounds to collaborate in raising awareness and change behaviours, policies and perspectives at every level of society.

Obama Presidency

2008 USA
www.barackobama.com

The Obama Presidency was the most popular nomination in our 2009 Phoenix Economy survey. The first African-American US President, Barack Obama is a symbol of new leadership for change—and his New Energy for America plan is remarkably ambitious.

Participant Media

2004 USA
www.participantmedia.com

In 2004, Jeff Skoll assembled a team of entertainment industry executives who shared his interest in creating quality entertainment that inspires and compels social change. In 2006, Participant produced the film *An Inconvenient Truth*, which went on to become a worldwide phenomenon, generating awareness about climate change and winning two Academy Awards.

PDA

1974 Thailand
www.pda.or.th/eng

Population control is a difficult issue to address, yet is one of our most critical priorities. PDA is a leading NGO in Thailand, addressing taboo-ridden issues of family planning and HIV/AIDS prevention through the use of condoms. It works with over 12,000 volunteers and uses participatory, community-based approach to propagate large-scale, national-level changes in culture. Humour is central to its work, as a means to deflecting shame and denial.

Solarcentury

1998 UK
www.solarcentury.com

Solarcentury was founded in 1998 to design and supply solar energy solutions for the built environment, and has gone on to become the UK's fastest growing solar energy company. It has the aim to revolutionize renewable energy markets and has recently championed an advocacy campaign "We Support Solar", to lobby the UK government to improve market incentives to the industry and consumers.

State of California

1850 USA
www.ca.gov/about/enviromresources/greenca.html

Long the bellwether state in terms of the environment, under Governor Schwarzenegger California has become a leader in climate and sustainability-related policies, demonstrating the power of visionary political will to shape new markets and industries. It is the 31st US State and the biggest contributor to the US GDP, and an evolving hotspot for America's renewable energy revolution.

Sustainable Asset Management (SAM)

1995 Switzerland
www.sam-group.com

SAM was established in Zurich in 1995 as the first asset management group focused exclusively on sustainability investing, and is now a leading edge reference for understanding and tracking sustainable investing practices. The firm's offering covers asset management products as well as a series of benchmarks including the Dow Jones Sustainability Index (DJSI)—the world's first index tracking the financial performance of sustainability leaders on a global scale.

TNT

1946 The Netherlands
www.tnt.com

The depth, ambition and sheer scale of the citizenship activities undertaken by the logistics company TNT is remarkable, from creating and underpinning humanitarian emergency logistics to large-scale tree-planting initiatives in Africa. As a package, freight and delivery company, TNT has gone 'beyond CSR' by using its business expertise and its global networks to demonstrate how distribution channels and logistic can contribute to shape future markets.

Virgance

2008 USA
www.virgance.com

Building critical mass by effectively engaging large groups of people will be a critical tool. Virgance is a for-profit company releasing a series of products that focus on using online social networks to transform markets and infrastructures. It builds on principles of social activism to design large-scale, citizen-powered global campaigns, including initiatives such as 'One Block Off the Grid (1BOG)', 'Carrotmob' and 'Lend Me Some Sugar'.

World Business Council for Sustainable Development (WBCSD)

1992 Switzerland
www.wbcsd.org
 WBCSD is a CEO-led, global association of 200 of the world's largest companies, focusing on advancing business and sustainability issues and strategies, with a future-oriented vision across industries and markets.

World Resources Institute (WRI)

1982 USA
www.wri.org

The World Resources Institute is a leading environmental think-tank in the USA, which goes beyond research to find practical ways to protect the earth and improve people's lives. Its prominent, high-impact spin-offs include EMBARQ (the WRI Center for Sustainable Transport), the Greenhouse Gas Protocol, and New Ventures.

World Toilet Organization (WTO)

2001 Singapore
www.worldtoilet.org

Sanitation must be a fundamental priority worldwide. The World Toilet Organization is a global non-profit organization committed to improving toilet and sanitation conditions worldwide. Building a powerful global network of 171 member organizations from 56 countries, WTO draws members from all regions to present a unified force and a global voice to address the sanitation crisis.

- ¹ Our own thinking has been powerfully shaped by the thinking of other economists, among them Nikolai Kondratiev and Joseph Schumpeter.
- ² www.earth-policy.org
See also visualization by Visible Strategies: <http://epi.visiblestrategies.com>
- ³ Thomas S. Kuhn, *The Structure of Scientific Revolutions*, The University of Chicago Press, 1962. See also: http://en.wikipedia.org/wiki/paradigm_shift
- ⁴ John Elkington, *The Chrysalis Economy*, Capstone / John Wiley & Sons, 2001.
- ⁵ *Growing Opportunity: Entrepreneurial Solutions to Impossible Problems*, SustainAbility for the Skoll Foundation, 2007.
- ⁶ *The Social Intrapreneur: A Field Guide for Corporate Changemakers*, SustainAbility for the Skoll Foundation, 2008.
- ⁷ John Elkington and Pamela Hartigan, *The Power of Unreasonable People*, Harvard Business Press, 2009.
- ⁸ www.sustainability.com/researchandadvocacy/radar_article.asp?id=322
- ⁹ *Creating Value for All: Strategies for Doing Business with the Poor*, United Nations Development Programme, New York, June 2008.
- ¹⁰ GE announced in October 2008 that, amidst global economic turbulence, revenues from its range of energy efficient and environmentally advantageous products and services would surge 21% to \$17 billion in 2008, see: <http://ge.ecomagination.com>
- ¹¹ 'Drug giant GlaxoSmithKline pledges cheap medicine for world's poor', *The Guardian*, February 13, 2009.
www.guardian.co.uk/business/2009/feb/13/glaxo-smith-kline-cheap-medicine
- ¹² The Monitor Institute 'Investing for Social and Environmental Impact'.
www.monitorinstitute.com/impactinvesting
- ¹³ CEPO launches Solar Capability Scheme to boost the use of solar technologies in new buildings, press release, May 8, 2008.
www.sedb.com/edb/sg/en_uk/index/news/articles/cepo_launches_solar.html
- ¹⁴ BBC News 'Report's Stark Warning on Climate' October 29, 2006.
<http://news.bbc.co.uk/1/hi/business/6096594.stm>
- ¹⁵ UNEP Press Release 'Realizing a Green Deal', February 16, 2009.
www.unep.org/documents.multilingual/default.asp?documentid=562&articleid=6079&l=en
- ¹⁶ An interesting comment from a major financial institution on GE was that their greening initiative is confined to Ecomagination, whereas a company like ABB increasingly applies its greening strategy to all of its projects.
- ¹⁷ *Growing Opportunity: Entrepreneurial Solutions to Insoluble Problems*, SustainAbility for the Skoll Foundation, 2007.
- ¹⁸ www.dni.gov/nic/NIC_2025_project.html
- ¹⁹ Peter Thai Larsen, Developing world faces massive fall in capital flows, *Financial Times*, January 28, 2009.
- ²⁰ *Global Trends 2025*, see: www.dni.gov/nic/NIC_2025_project.html
- ²¹ Steve Londner, TechnoServe, USA.
- ²² Fabio Rosa, IDEAAS, Brazil.
- ²³ Elizabeth Hausler, Build Change, USA.
- ²⁴ MAARDEC, Nigeria and others.
- ²⁵ Namrita Kapur, Root Capital, USA and many others.
- ²⁶ www.sam-group.com/yearbook/download/yearbook_current.pdf
- ²⁷ www.unep.fr/energy/finance/activities
- ²⁸ www.changemakers.net/node/6722
- ²⁹ Chris Baker, Live Free or Drown, *Wired*, February 2009.
- ³⁰ <http://my.barackobama.com/page/content/newenergy>
- ³¹ Richard H. Thaler and Cass R. Sunstein, *Nudge: Improving Decisions About Health, Wealth and Happiness*, Yale University Press, 2008.
- ³² A draft of the Agenda was tested with a brains trust of entrepreneurs.
- ³³ www.ageofstupid.net
- ³⁴ www.london-accord.co.uk
- ³⁵ 'Nation's Largest Investors Call for "Green Recovery": Urge Congress to Support Energy Efficiency and Clean Energy in Economic Stimulus Bill', January 26, 2009.
www.incr.com
- ³⁶ www2.goldmansachs.com/ideas/environment-and-energy/gc-sustain/index.html
- ³⁷ www.timesonline.co.uk/richlist
- ³⁸ http://en.wikipedia.org/wiki/world_social_forum
- ³⁹ The selection panel was made up of John Elkington, Alejandro Litovsky, Charmian Love and Smita Sircar from Volans; Alexa Clay and Patrin Watanatada of SustainAbility; Sam Gray of Apposite Capital; and Molly Webb of The Climate Group.
- ⁴⁰ Finalists did not need to meet all the criteria to be included in the Phoenix 50

Acknowledgements

First and foremost, we are profoundly grateful to the Skoll Foundation—particularly Jeff Skoll, Sally Osberg, Dan Crisafulli and Lance Henderson—for their generous funding and fearless support.

Second, we also gratefully acknowledge the support of the Singapore Economic Development Board in building the software and other infrastructures for our Phoenix Economy work.

Third, we say a heart-felt thank you to the Volans team that prepared the report: Alejandro Litovsky, Charmian Love, John Elkington, Kevin Teo, Sam Lakha and Smita Sircar—plus our colleagues Allen Tan, Geoff Lye and Pamela Hartigan.

Fourth, we thank SustainAbility for their support throughout, particularly Maggie Brenneke, Mark Lee and Sophia Tickell—and Alexa Clay and Patrin Watanatada who helped with the selection process, as did Molly Webb of The Climate Group and Sam Gray of Apposite Capital.

Fifth, we thank James Baderman for his contributions to the Phoenix 50 genesis, Yasmin Crowther for her insight and editorial guidance and Rupert Bassett for his design.

Sixth, and most importantly in terms of our Phoenix 50 selection process, we also thank the 114 entrepreneurs who completed our latest survey and Liz Maw and the members of Net Impact, the SustainAbility Faculty and Volans Ecosystem who helped us in so many ways.

Publication Details

Title

The Phoenix Economy:
50 Pioneers in the Business
of Social Innovation
First Edition 2009

ISBN

978-0-9562166-0-1

Copyright

© 2009 Volans Ventures Ltd. All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, electrostatic, magnetic tape, photocopying, recording, or otherwise, without permission in writing from the copyright holders.

Publisher

Volans Ventures Ltd
2 Bloomsbury Place
London WC1A 2QA
UK
T +44 (0) 207 268 0390
F +44 (0) 207 268 0391
www.volans.com

phoenix@volans.com

Design

Rupert Bassett

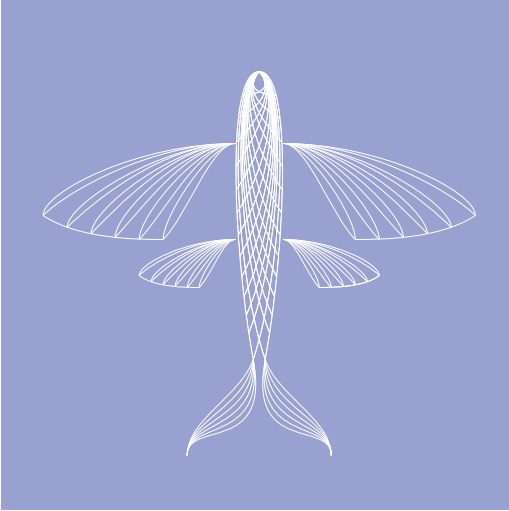
Print

Pensord Press

Paper

Robert Horne
Revive 100 Offset

Volans



Our mission is to help the future take flight. Volans means flying in Latin, as in *Pisces volans*, the flying fish. Founded in March 2008, we are based in London and Singapore. Part broker, part incubator, part think-tank, part consultancy, Volans works globally with entrepreneurs, businesses, investors and governments to develop and scale innovative solutions to social and environmental challenges.

The Volans Advisory Board comprises: Tim Brown, CEO, IDEO, USA; J Gregory Dees, Professor of the Practice of Social Entrepreneurship and Nonprofit Management, Fuqua School of Management, Duke University, USA; Frans Johansson, Author, *The Medici Effect* and Managing Director, Medici Capital Management; Jerry Linenger, Astronaut and Cosmonaut, USA; Jane Nelson, Senior Fellow and Director of Corporate Social Responsibility Initiative, Mossavar-Rahmani Center for Business and Government, Kennedy School of Government, Harvard University, USA/UK/Zimbabwe; Ndidi Okonkwo Nwuneli, Founder/CEO of LEAP Africa, Nigeria; David Puttnam, film producer and member of the House of Lords, UK; Bunker Roy, Founder, Barefoot College, India; Tim Smit, Founder, The Eden Project, UK; Antonio Soler, serial entrepreneur, France; and Herta von Stiegel, Ariya Capital Group, UK.

Volans Ventures Ltd
2 Bloomsbury Place
London WC1A 2QA
UK
T +44 (0) 207 268 0390
F +44 (0) 207 268 0391
www.volans.com

phoenix@volans.com



SustainAbility

