

2016 ANNUAL REPORT

CO-CREATING THE REGENERATIVE ECONOMY

TABLE OF CONTENTS

LETTER FROM OUR FOUNDER 2

ORGANIZATION OVERVIEW 4

HIGHLIGHTS OF OUR WORK..... 5

FACES OF THE FIELD GUIDE..... 7

THE FIELD GUIDE TO A REGENERATIVE ECONOMY 8

APPLIED RESEARCH..... 9

FISCAL SPONSORSHIP 11

MEDIA HIGHLIGHTS..... 12

REACH SNAPSHOT 15

LOOKING AHEAD 18

LEADERSHIP & TEAM 20

ADVISORS AND CLOSE COLLABORATORS..... 24

EXHIBIT I: RARE FOUNDING MEMBERS:..... 25

SUPPORTERS..... 32

LETTER FROM OUR FOUNDER



Dear Stakeholders,

At Capital Institute our work is focused on a new, regenerative way for humanity to organize and manage its economic activity for the coming decades, not just for the coming months or years. Consequently, we generally take a non-partisan stance when it comes to the short-term political noise of the day. That isn't to say that we don't see the notable events of 2016 — first Brexit, then

Trump — as representing seismic shifts in the global political landscape. It is to say that we also see them in the much broader context of a great change, a systemic shift that changes civilization and alters the way we see the world.

The pundits see the current angry populist surge narrowly as an understandable backlash against the smug and arrogant political elite who have failed to address the economic malaise gripping many western economies. That angry response has created a political climate of uncertainty, in all its shocking, unattractive, and frightening forms. But if we observe these upheavals through the long-term lens of decades, not years, our viewpoint shifts in a profound way. While we can never minimize or discount the effects the current political climate will have on the lives of some of the most vulnerable among us, a long-term view keeps us from losing sight of the landscape that will remain long after this firestorm has passed, a landscape upon which we must build a just and sustainable future for all.

I am struck by the fact that it is the 25th anniversary of Francis Fukuyama's *The End of History and the Last Man*, a provocative suggestion that the advance of history will now end thanks to the arrival of Western liberal democracies, with their concurrent neoliberal economic model of free markets, limited government, unfettered global trade, and prosperity through undifferentiated growth and technological advance.

“At the end of history,” Fukuyama wrote, “it is not necessary that all societies become successful liberal societies, merely that they end their ideological pretensions of representing different and higher forms of human society.”

There may be no better evidence of the smugness and arrogance – and ignorance for that matter – that has brought us to this place than Fukuyama’s thesis, shared by too many political and business “leaders” in the West. Our “higher form of human society” defines itself by its political corruption, its extreme inequality and a multitude of injustices that rob a growing percentage of global citizens of their dignity; exponential and therefore destabilizing technological advance free of any moral guideposts or even thought; a food system that poisons people, destroys soil, and depletes water supplies; and an energy system that is destabilizing the climate, posing an existential threat to civilization. How could humanity have the “pretension” to hope for anything “higher” than that?

In the pages that follow, I hope you are inspired by the rich diversity of courageous and enterprising people drawing on the noble human spirit in the face of the flames all around them, by the evolution of economic thought that most certainly is continuing, and by the fact that history remains very much alive.

Thank you for your interest and support of our work.

A handwritten signature in black ink, appearing to read 'J. Fullerton', with a long horizontal stroke extending to the right.

John Fullerton

ORGANIZATION OVERVIEW



Capital Institute was founded in 2010 by John Fullerton, a former JPMorgan managing director with two decades of experience in global capital markets and private investment. We are a collaborative space exploring the economic transformation to a more just, regenerative, and thus sustainable way of living on Earth.

It is our view that the exponential growth of compound investment returns required by the financial system is in irreconcilable conflict with the finite boundaries of the biosphere. We believe this relentless and narrow pursuit of exponential growth of returns on financial capital, without reference to either modern (integral) science's latest understanding of how the world actually works, or to universally acknowledged moral and ethical values, is corrupting our institutions, contributing to ever-widening and socially destabilizing levels of inequality, and leading directly to ecosystem and related security crises around the globe.

Our mission is to provide a new narrative of the supportive, non-coercive role finance must play in the transition to a Regenerative Economy, an economy that harmonizes the multiple kinds of capital essential to planetary well-being. It is John's experience and personal story that gives us a uniquely credible voice that transcends both the current liberal/conservative polarity, and the mainstream/alternative economic divide.

HIGHLIGHTS OF OUR WORK

Capital Institute entered 2016 emboldened by the Pope's encyclical on environmental and economic justice, the signing of the Paris Agreement, and the growth of worldwide fossil fuel divestment. The importance of our work was reinforced in the months that followed as global citizens wrestled with historic crises: the growing migrant crisis, the rise of populism culminating in Brexit, and the tumultuous U.S. presidential election. The world, we have found, is in need of regenerative economic principles to realize a more just and sustainable way of life now more than ever. In response, we assumed a multifaceted approach to help accelerate the natural transition from theory to implementation and activation.

John took to the road, taking in part in more than 20 public appearances or private collaborative engagements and delivering the principles of Regenerative Capitalism to new audiences across the globe, including Toronto, Montreal, Dublin and cities throughout the United States. The growing demand for Capital Institute's work at conferences and classrooms worldwide enabled the strengthening of current partnerships and the expansion of the organization's network to include an increasingly diverse set of investment, thought, business, community, and academic leaders.

The continuation of our storytelling efforts through Capital Institute's Field Guide to a Regenerative Economy not only captures the natural emergence of the regenerative framework, but it is also establishing a new narrative — a lens through which we are all able to realize the value of long-term business profitability combined with social and environmental sustainability. Led by Susan Arterian Chang, our Field Guide project has captured more than 40 on-the-ground examples of regenerative principles in action across industries and, in 2016, captured Regenerative Capitalism on film via the production of our first documentary: "A Year In The Life of First Green Bank."



The excitement generated by this new narrative led Capital Institute in 2016 to combine our theoretical framework, storytelling, and close collaboration with our Research Alliance for Regenerative Economics (RARE) colleagues — work led by RARE Director and Capital Institute Science Advisor Dr. Sally Goerner — to lay the groundwork for a regenerative economic development workshop series, the first of which is set to be held in Buffalo, New York in Spring 2017.

The past year has produced considerable momentum for the organization, shaping the core of the organization's future work: education and activation. Looking ahead, this work will be realized through the publishing of a second white paper, "Regenerative Finance," which will form the basis of a book (publisher committed), and continued workshops to foster the emergence of regenerative practices.

FACES OF THE FIELD GUIDE

Now in our seventh year of storytelling The Field Guide has illuminated the stories of over forty regenerative projects and enterprises. A real community of practice is emerging from our work.

THE FIELD GUIDE TO A REGENERATIVE ECONOMY

The Field Guide to a Regenerative Economy is embarking on its seventh year of storytelling with over forty stories shared thus far. This past year we shared the news of a diversity of initiatives and businesses, from regenerative investing projects by small groups and individuals to a mom and pop cooperative grocery store bringing healthy foods to Bed-Stuy, Brooklyn; from a small Wisconsin enterprise that manufactures elegant structural systems from small-diameter tree trunks to a story of place in the Brandywine River Valley of Pennsylvania. We also produced a short documentary film as the culmination of our “Year in the Life of First Green Bank” project and screened it to an enthusiastic audience at the Patagonia SOHO store in New York City in November. Following the film’s premiere, public radio and television host David Brancaccio said:

“TOO OFTEN, CASE STUDIES LACK AUTHENTICITY. THIS FILM HAS IT. THE DOC HAS THE COURAGE TO TELL AN UNBLINKING STORY ABOUT THE PROMISE AND, YES, THE CHALLENGES OF DESIGNING A BUSINESS WITH A HIGHER PURPOSE. WATCHING THIS WILL INFORM ANY ORGANIZATION TRYING TO EMBRACE A BROADER NOTION OF SUSTAINABILITY.”

The film was the result of a year-long collaboration with First Green Bank and its CEO Ken LaRoe, a seasoned banker on a journey toward delivering sustainable economic, social, and environmental value to his community. The film posed a critical question: Can the tools of finance and banking be used not just for short-term financial gain, but to support the regeneration of our human communities and economies, and the stressed ecological systems upon which they depend for survival? LaRoe’s journey, combined with the challenges and triumphs experienced by First Green Bank, provide an example for the finance and banking industry as a whole.

APPLIED RESEARCH



Regenerating Tottenville

redesigning NYC's southernmost community for the 21st century

REGENERATING TOTTENVILLE
[Home](#)
[Tottenville Through Its Historian's Eyes](#)
[Looking Back to Look Forward](#)
[The View From Conference House Park](#)



THE FIELD GUIDE

TO A REGENERATIVE ECONOMY
A Project Of Capital Institute

Introducing our new activating storytelling project

[What is activating storytelling?](#)

The Regenerating Tottenville Project

From oystering to strip malls to a community of ongoing learning: Searching for the path to 21st century revitalization.

A Note from the Project Director

I grew up in Prince's Bay, on the south shore of Staten Island, in the 1950s and '60s. My recollections of the neighboring town of Tottenville, where I attended high school, was of a quiet marine village—at the southernmost tip of New York City—surrounded by water and centered on a Main Street populated by small retail shops and professional businesses. Staten Island was always isolated from its New York City neighboring boroughs, reachable to them, in the years I grew up, only by ferry service. The south shore had a particularly rural feeling. Although we often felt forgotten and neglected by the more urban boroughs, we were proud to be part of New York City—our mayor was the mayor of New York, and our public schools were New York City public schools.

In June 2016 I returned to Tottenville with two Field Guide colleagues to see the site of a planned \$60 million HUD-sponsored storm mitigation/community engagement project called Living Breakwaters. What I saw of



Linda Cutler Hauck Reflects
The founder of the Tottenville Historical Society talks about the impacts of the breakdown of community ties in her home town, the decline of Main Street, and her

To be successful, Regenerative Economics and Regenerative Finance, in particular, must be able to integrate science and story, theory and practice, human factors and technical ones. With expertise in fields ranging from international development and Regenerative Finance to nonlinear dynamics and ecological modeling, our interdisciplinary RARE team of systems scientists is dedicated to bringing this integrated approach into the real world.

In 2016 RARE worked to achieve four goals: 1) create a series of regenerative development workshops; 2) anchor regenerative theory in peer-reviewed academic journals; 3) develop a core curriculum; and, 4) apply for research grants.

Working with RARE's international development practitioners, Eric Derks and Mike Fields, we have developed a place-based, iterative learning approach to developing local change circles, empowering them with the tools, concepts, and human relationships needed to bring effective regenerative development to their locale. We are working with partners in Western Michigan, Western New York (Buffalo), and New York City (Tottenville, Staten Island) to implement these learning approaches, with the first project launching in Spring 2017.

Workshops are also designed to demonstrate the role of institutions in producing lasting, positive change in market systems; teach basic techniques for assessing local institutional landscapes; create a strategic learning plan for institutional transition toward regenerative practices; and support learning through access to a network of regenerative learners, certified regenerative consultants, and a set of rigorous measures that clarify systemic health.

Having completed its first full year in existence, RARE's work has reached new heights, including the scheduled publication of a white paper outlining the empirical basis of Regenerative Economics that demonstrates the evolution of economic thought, including comparisons and contrasts with existing schools of thought. Additionally, we continue to work with the French Ministry of Finance to publish a paper exploring how ecological models and flow network methods can create an integrated understanding of the causes of financial instability.

FISCAL SPONSORSHIP

Our public purpose and collaboration continues to expand, as Capital Institute served as fiscal sponsor to three mission-aligned projects in 2016: Kate Raworth's Doughnut Economics, published in the Spring of 2017; CREO Network, which has experienced significant growth and is on the path toward achieving non-profit status; and Innovative Term Sheets for Impact Investing.

MEDIA HIGHLIGHTS

- “Broken Trust,” *Huffington Post*, January 27, 2017 (Cross-Posted on Medium & 3BL).
- “New Year, New Career: Local Business Owners Find Fulfilment in Career Changes,” *Westport News*, January 4, 2017.
- “City States Rising,” *Huffington Post*, December 29, 2016 (Cross-Posted on Medium & 3BL).
- “Greenwich Think Tank Aspires to Revamp Economy,” *Greenwich Time*, December 19, 2016.
- “Capital Institute, Think Tank Behind Regenerative Capitalism Launches First Documentary,” *BusinessWire*, December 7, 2016.
- “President-Elect Trump: A Gift?,” *Alt Energy Stocks*, November 11, 2016 (Cross-Posted on *Huffington Post*, Medium & 3BL).
- “Sail On, Sail On, Sailor,” *EcoWatch*, September 17, 2016 (Cross-posted with *Huffington Post*, Medium & 3BL).
- “John Fullerton: The Emergence of Regenerative Capitalism,” *LIFT Economy*, July 25, 2016.
- “Brexit: Ignorance Calls Out Ignorance,” *Huffington Post*, July 15, 2016 (Cross-posted with Medium).
- “What’s the Matter with America? The breakdown of love, strength, and intelligence,” *Huffington Post*, June 21, 2016 (Cross-posted with Medium).
- “To Break ‘Em Up, or Not to Break ‘Em Up, That is the (Wrong) Question,”

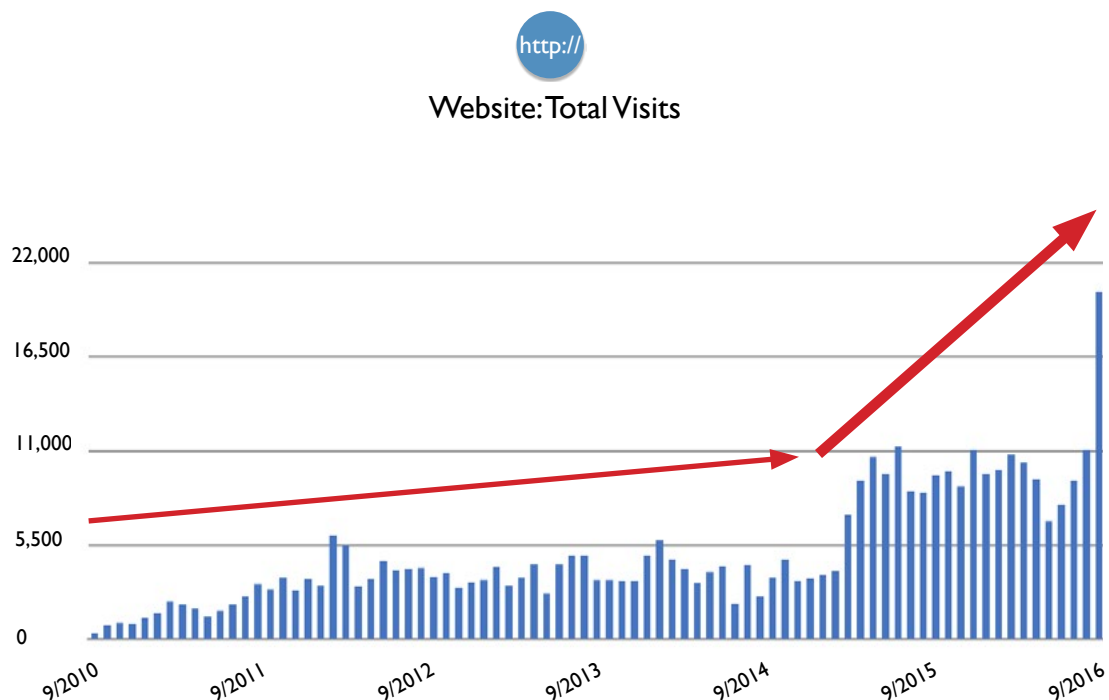
-
- Huffington Post*, May 24, 2016.
- “How Transforming to a Regenerative Economy Can Help Save the Environment and Advance Social Justice,” *Alternet*, May 12, 2016.
 - “Can Banking Go Beyond The Balance Sheet?” *VoiceAmerica Business Channel*, May 12, 2016.
 - “Capitalismo Regenerativo,” *Semana Sostenible*, May 11, 2016.
 - “John Fullerton & John Bloom Regenerative Finance Interview,” *Radio Woodstock*, April 30, 2016.
 - “Trump, Sanders, and the Collapse of American Oligarchy,” *Economics*, April 29, 2016.
 - “Earth Week Line Up Has Something For Everyone,” *UB Reporter*, April 18, 2016.
 - “The World In a State of Extreme Transition: Moving from Sustainability to Regenerative Design,” *Medium*, April 15, 2016.
 - “The Capital Institute Regenerative Business Growth Event,” *Reuters Insider*, March 4, 2016.
 - “Extreme Inequality = Economic Collapse,” *EcoWatch*, February 10, 2016.
 - “What the Bundy Militia Can Learn From TransCanada,” *EcoWatch*, January 14, 2016.

REACH SNAPSHOT

Capital Institute delivers content via a variety of formats and platforms with the goal of building and appealing to our growing and diverse constituency. From our monthly e-bulletin and syndication of the *Future of Finance* blog to our family of websites and digital networks, we work to meet our audience where they are in an effort to share the potential of a regenerative economic framework. Social media has been a key element of our communications efforts, referring more than a quarter of our online traffic. Our Google Adwords grant of up to \$10k per month refers, on average, an additional 30 percent of our total traffic.

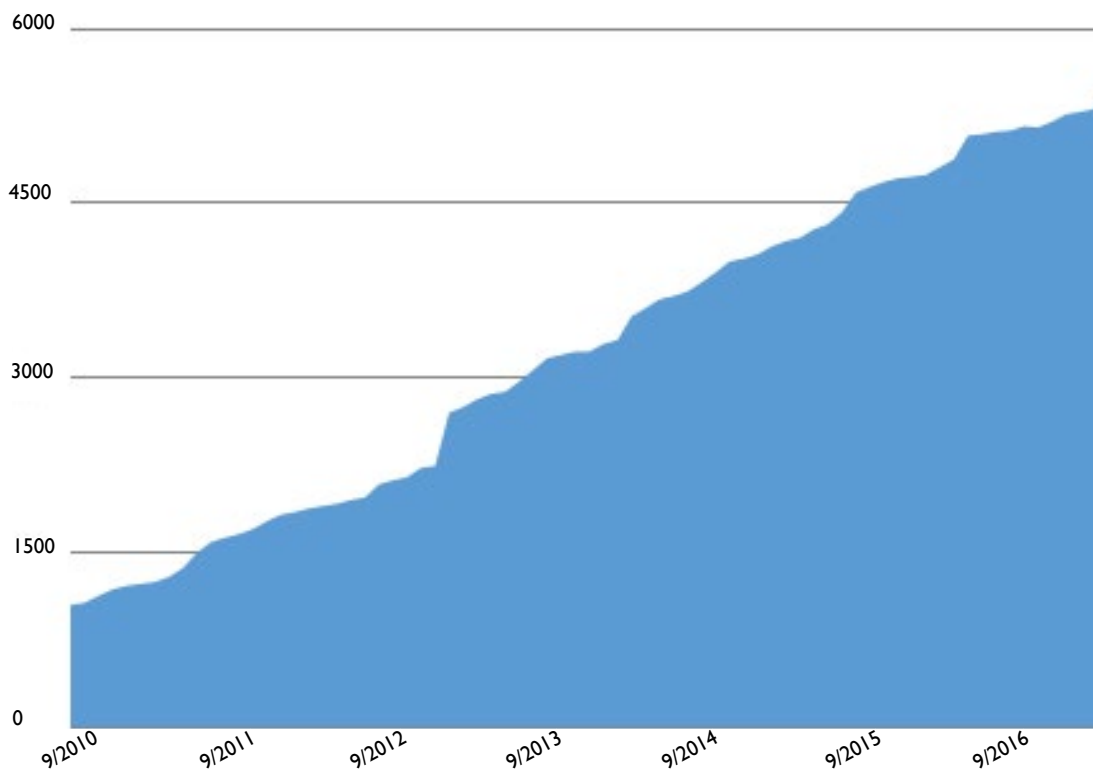
Through social media, we have succeeded in building an engaged group of followers who regularly share our work with their communities, and we continually seek to leverage new tools to retain and expand our reach, including investment in new forms of content, distribution services, and social media advertising.

The following is a snapshot of what our reach looked like as of December 2016.





Total Newsletter Subscribers:



Social Media Reach (43,204 People):



3,688 Twitter Followers



5,072 LinkedIn Group Members
(Plus, John has **2,043** Contacts)



26,914 Facebook Likes



YouTube

Channel Views: **23,713**



Constant Contact

5487 Subscribers

LOOKING AHEAD



SHAPING THE REGENERATIVE ECONOMY

As our work continues to grow beyond theory to activation, we continue to explore and invest time and resources in shaping the Regenerative Economy. This includes our work in western New York where we will hold the first of several workshops to help leaders across industries implement regenerative practices. Supplemental to this work — and critical to the transition of a truly Regenerative Economy — is the publication of a second white paper: “Regenerative Finance.” To be released in 2017, “Regenerative Finance” will articulate the design and operation of a financial system that serves the emergence of regenerative economies.

OUR NEXT STORYTELLING PROJECT

We have many more stories to tell in the upcoming year, including more international ones. And for a new activating storytelling project about a town at the southernmost tip of New York City, “Regenerating Tottenville,” we’ll collaborate with local change agents to explore how the new science of regenerative human networks can guide community social and economic regeneration. We will also adapt The Field Guide

stories for Regenerative Economy workshop applications in select cities around the country. Also look out for a Field Guide podcast series and more short videos as part of our plan to engage our audience through a variety of communications channels.

RESEARCH ALLIANCE FOR REGENERATIVE ECONOMICS

Though the Systems Science that supports, unifies, and adds rigor to new economy efforts has been developing for decades, the public is largely unaware of its potential to revolutionize our socio-economic thinking in ways that preserve the essence of free-enterprise democracy; show how to progress past the failures of today's corporate oligarchy; identify key conditions of regenerative vitality; and, allow us to measure our progress toward it. The best way to bring this science into our everyday lives is to create a story of Regenerative Economics that is simultaneously clear, compelling, accurate, and integrated.

RARE's primary goal in 2017 is to support the development of the Regenerative Economics story, one that shows the commonsense connection between the scientific story of human networks and our long-term observations of how humanity's intertwined social, economic and political systems grow, develop and evolve. As mentioned above, we will be working closely with our Field Guide colleague Susan Arterian Chang to tell the story of how the science behind healthy human networks can guide community regeneration.

LEADERSHIP & TEAM

Since its founding in 2010, Capital Institute has assembled a team of professionally diverse individuals whose collective experience and expertise position the organization to successfully catalyze the global shift toward a just, regenerative, and thus sustainable way of life on this earth. In the past year, we offered our congratulations to our former director of communications, Emily Walsh, as she and her husband welcomed a baby boy, Teddy Francis, to the world. Having led our communications efforts for four years, Emily's contributions profoundly shaped our organization and the success we've had in bringing Regenerative Capitalism to audiences worldwide. As she welcomed baby Teddy, we welcomed a new communications director to our team in Julian McKinley.



John Fullerton, Founder and President of Capital Institute, a “collaborative working to transform finance to serve a more just, regenerative, and sustainable economic system.” John has become a recognized thought leader in the New Economy space generally, and the financial system transformation challenge in particular. John is a former Managing Director of JPMorgan where he managed various capital markets and derivatives businesses around the globe, then shifted focus to private investments and was subsequently the Chief Investment Officer of LabMorgan before retiring from the bank in 2001. He was a member of the Long Term Capital Oversight Committee that managed the \$3.6 billion rescue of the distressed hedge fund in 1998. He received a BA in Economics from the University of Michigan, and an MBA from the Stern School of Business at NYU.



Susan Arterian Chang, Director of Content and The Field Guide, has worked in the world of both global capital markets and local economies. As a financial writer she covered the evolution of risk management for a variety of investment and corporate finance publications. She also worked as a foreign exchange analyst and on the strategic trading desk at MHT Bank. She was the publisher of an award-winning community newspaper that championed locally based decision-making in a small city struggling to revitalize. Susan holds a BA in English Literature from Reed College and did graduate work in the MBA program of NYU's Stern School of Business with a concentration in finance.



Dr. Sally J. Goerner, Science Advisor to Capital Institute, has advanced degrees in engineering, nonlinear dynamics, and psychology. Dr. Goerner lectures worldwide on how the Energy-Network Sciences can create a commonsense narrative of how to rebuild economic vitality by revitalizing human networks. She is best thought of as scientific missionary devoted to helping smooth the transition from modern society to a sustainable Global Learning civilization by providing those already struggling with great change in education, economics, business, medicine, politics, community, etc. with a solid foundation and a clear vision of how their fragments of reform fit together.



Julian McKinley, Director of Communications, has a background in non-profit communications, marketing, and community journalism. He previously worked for United Way, raising awareness of education- and financial security-related issues while driving fundraising and other corporate social responsibility initiatives. He began his career as a community news editor in central Connecticut where he founded and managed operations of hyperlocal news websites. He holds a BA in Communications from Springfield College.



Nora Bouhaddada, Leverager for John Fullerton at Capital Institute, supports his daily workflow. She previously worked at UBS Financial Services, Bridgewater Associates, and Trafigura AG. During the summer of 2011, Nora volunteered and took a design course at the Permaculture Research Institute in Australia. She received a BA in Economics from the University of Connecticut and intends to pursue a PhD after working in the field of regenerative capital.



Romain Svartzman, Research Associate, is a Ph.D. candidate at McGill University and a scholar of the Economics for the Anthropocene initiative. He brings a wealth of experience to his role, including having worked in asset management, corporate social responsibility, and as an environmental and social specialist for the International Finance Corporation. His research aims to contribute to the emergence of a monetary and financial system that respects our planet's boundaries. He holds a master's degree in Finance and International Business and a bachelor's degree in Political Science from Sciences Po Paris. He also holds a degree in Economics and Law of Climate Change from FLACSO Argentina.



Marie McCann, Designer of *The Field Guide to Investing in a Regenerative Economy* initiative, is an artist, graphic designer, and environmental advocate. Marie holds dear the belief that if we can envision the world that we want to live in, we can realize it. A graduate of Parsons School of Design, she brings her expertise in design and digital media to the presentation of *The Field Guide* and is passionately pursuing new formats for digital storytelling.

ADVISORS AND CLOSE COLLABORATORS

- Peter Brown, Professor at McGill University
Stuart Cowan, Partner of Autopoiesis LLC.
- * Robert A. Johnson, Executive Director for the Institute for New Economic Thinking.
Hunter Lovins, President of Natural Capitalism Solutions; Co-Author of *Natural Capitalism*.
 - * Larry Lunt, President of Armonia, LLC.
David W. Orr, Counselor to the President at Oberlin College; Founder and Chair of the Board of The Oberlin Project.
 - * Diana Propper de Callejon, Managing Director at Cranemere, Inc.;
Bill Reed, Principal at both the Re-source Group and Regenesiis.
William Rees, Professor Emeritus and former Director of the University of British Columbia's School of Community and Regional Planning (SCARP).
Carol Sanford, Educator; Author of *The Responsible Entrepreneur* and *The Responsible Business*.
Allan Savory, Founder of the Savory Institute.
Don Shaffer, CEO, RSF Social Finance.
Gus Speth, Author; Professor of Law at Vermont Law School.
Vincent Stanley, Director of Philosophy, Patagonia.
Stewart Wallis, Executive Director of the New Economics Foundation.
Anders Wijkman, Swedish politician who was Member of the European Parliament from 1999 to 2009.
Allen White, Vice President and Senior Fellow, Tellus Institute; Co-Founder/
Former CEO of Global Reporting Initiative.
 - * Richard Zimmerman, Advisor, WE Family Offices
 - * **Board of Directors**

EXHIBIT I: RARE FOUNDING MEMBERS:

Anamaria Berea, Ph.D. has a doctorate degree in Computational Social Science from George Mason University and a doctorate degree in International Business and Economics from the Academy of Economic Studies in Romania. She has been working in research at the intersection of economics and complex systems for the past 11 years. Her research includes agent-based models of company growth, information crowdsourcing, prediction markets, Bayesian networks, social network analysis, large scale (“big data”) analysis, text and sentiment analysis, and framing qualitative into quantitative modeling, diffusion of fashion, social media impact on crowd-funding success and the emergence of language and communication in socio-biological networks. She is a Teradata University Network Faculty Award Winner and her work has been published in *Journal of Washington Academy of Science*, *Decision Analytics*, *AAAI Proceedings*, *Quantitative Finance*, *Handbook of Human Computation* and *Journal of Strategic Security*. Her research has been supported by grants from ONR, IARPA, DARPA and the National Academies of Sciences. She is a member of the Washington Academy of Sciences and Eastern Economics Association.

Stuart Cowan, Ph.D. is a Partner with Autopoiesis LLC, which applies nature’s own forms of self-organization to develop regenerative design, regenerative economics and finance, and regenerative systems modeling services for the built environment, organizations, and communities. Stuart also serves as Chief Scientist for Smart Cities Council, which accelerates urban sustainability and resilience internationally. Autopoiesis LLC is one of six organizations leading the international Economics of Change initiative to transform real estate investment models to include a comprehensive range of ecological and social value layers. Stuart served as a Transaction Manager and founding team member with Portland Family of Funds, an innovative sustainable community investment fund, where he pioneered the use of ecosystem services and green buildings in the federal New Markets Tax Credits program. He served as Conservation Economy Research Director at Ecotrust, where he led the development of the Reliable Prosperity framework for a regenerative bioregion. He is the co-author with Sim Van der Ryn of *Ecological Design*, a visionary overview of the whole systems

integration of ecology and the built environment. He received his doctorate in Applied Mathematics from U.C. Berkeley with a focus on complex systems and ecological economics. He has taught at the Bainbridge Graduate Institute's Sustainable MBA program, U.C. Berkeley, and Portland State University. He lives in Portland, Oregon with his wife and daughter.

Eric Derks, Ph.D. is Director of The Canopy Lab, a nonprofit group of international development practitioners, project managers, researchers, strategic advisors, trainers and theorists, whose mission is to: "seed an ecosystem of individuals and organizations dedicated to the pursuit of systems thinking approaches that address complex social challenges and local and international development." Eric comes to Systems thinking through nearly 20 years of experience in international development, mostly in market systems and organizational development. Working with groups and projects such as Tetra Tech ARD, ACIDI/VOCA's ADVANCE Project; and Action for Enterprise, Eric has designed and led large-scale projects, molded high-performance teams, and learned a great deal about applying systems thinking to project strategy activities, operations and knowledge management. He believes that, for systems thinking to take hold, organizations need to: be learning organizations; have metrics for both modeling systems and assessing activities; and employ critical thinkers who can experiment, challenge assumptions, and be comfortable with failure and uncertainty.

Brian D. Fath, Ph.D. is Professor in the Department of Biological Sciences at Towson University (Maryland, USA) where he teaches courses in ecosystem ecology, environmental biology, networks, and human ecology and sustainability. Brian has taught courses on ecological networks and modeling in Portugal, Denmark, China, France, Germany, Italy, Croatia, and South Africa. He is also research scholar at the International Institute for Applied Systems Analysis in Laxenburg, Austria and is Editor-in-Chief for the journal *Ecological Modelling*. He has published over 100 research papers, reports, and book chapters and co-authored the books *A New Ecology: Systems*

Perspective and Ecological Modelling (4th edition). He currently serves as President of the North American Chapter of International Society for Ecological Modelling and Chair of Baltimore County Commission on Environmental Quality. He held a Fulbright Distinguished Chair position at Parthenope University of Naples, Italy in spring 2012.

Michael Field, Ph.D. is Chief of Party for Development Alternatives International (DAI) focused on International Trade and Development in Dhaka, Bangladesh. With over 20 years of designing, assessing, implementing and training in Systems and Learning-based approaches, Mike has served as: the technical lead on a DFID-funded market development project in Kenya; a senior technical specialist for Adam Smith International's ACIDI/VOCA; principal designer and technical lead for USAID's PROFIT Project in Zambia, an innovative value chain systems program; and played a key role in setting learning and research agendas in value-chain Systems thinking through USAID's Microenterprise Development Office. Before working for USAID, Mike was the principle technical advisor on a range of private sector development projects for DAI. Mike earned his M.B.A. from the George Washington University and his B.S. in finance and international business from Drexel University.

Dan Fiscus, Ph.D. is Sustainability Liaison for the College of Liberal Arts and Sciences and teaches in the Sustainability Studies and Interdisciplinary Studies programs at Frostburg State University in Frostburg Maryland. He earned a BS in electrical engineering from Duke University, an MS in Ecology with a minor in Biomathematics from North Carolina State University, and a PhD in Environmental Science from the University of Maryland while at the Appalachian Laboratory. His research interests include holistic understanding of sustainable human-environment and life-environment relations, theoretical ecology and ecological modeling, ecological network analysis, and sources of leverage for social change to benefit humanity. He is also Development Director for Frostburg Grows, a multi-faceted project integrating local food production, a native tree nursery growing trees for restoration purposes, composting,

solar energy and training and economic development, all together on a former coal mine site providing an innovative model for sustainable development in Appalachia.

Sally Goerner, Ph.D is Capital Institute's science advisor; and director of the Research Alliance for Regenerative Economics ("RARE"). She is exploring with us the scientific foundation for regenerative organizations, financial systems, and economies. Sally lectures worldwide on how the Energy Network Sciences (ENS) can create a commonsense narrative of how to rebuild economic vitality by revitalizing human networks. Working with Belgian financier Bernard Lietaer and network theorist Robert Ulanowicz, Sally recently helped create a precise empirical measure of economic sustainability that shows why systemic health in economic networks requires maintaining a critical balance of resilience and efficiency. Sally holds advanced degrees in engineering, nonlinear dynamics, and psychology from SUNY Binghamton, The Saybrook Institute and the University of North Carolina at Chapel Hill, respectively. She is a member of the General Evolution Research Group (GERG); past-president and co-founder of the Society for Chaos Theory in the Life Sciences; and director and founder of the Integral Science Institute. She has written over 50 articles and four books: *The New Science of Sustainability: Building a Foundation for Great Change* (2008); *After the Clockwork Universe: The Emerging Science and Culture of Integral Society* (1999/2007); *The Coming Great Change in Education* (2007); and *Chaos and the Evolving Ecological Universe* (1994). She's a co-author with Benard Lietaer of *Money and Sustainability: The Missing Link – Report from the Club of Rome* (2012).

Of her book, *After the Clockwork Universe*, renowned urbanist Jane Jacobs said: "...fascinating and amazing in scope. This is the current human condition, socially and scientifically, laid out for all to see."

Laura Lengnick, Ph.D., is an award-winning soil scientist who has explored agricultural sustainability for more than 30 years as a researcher, policy-maker, educator, and farmer. Her work in sustainable farming systems was nationally recognized and she contributed to the 3rd National Climate Assessment as a lead author of the USDA report *Climate Change and U.S. Agriculture: Effects and Adaptation*. Laura led the academic program in sustainable agriculture at Warren Wilson College for more than a decade, where she also served as the Director of Sustainability Education, conducted research in sustainability assessment and holistic management, and led energy descent action planning and the development of an adaptive sustainable dining policy for the college. In 2015, Laura left the college to launch Cultivating Resilience, LLC, a private consulting firm offering ecosystem-based climate risk management services to government, business, and communities. She serves as an advisor to the USDA Climate Science Learning Network, NC Adapt, and the North American Climate Smart Agriculture Alliance. Laura is an affiliated researcher with the Appalachian Sustainable Agriculture Project's Local Food Research Center and holds an adjunct faculty position in Horticulture at North Carolina State University. Her new book, *Resilient Agriculture: Cultivating Food Systems for a Changing Climate* (New Society Publishers), examines climate change, resilience and the future of food through the adaptation stories of 25 award-winning sustainable producers across the U.S.

Bernard Lietaer, author of *The Future of Money* (translated in 18 languages), is an international expert in the design and implementation of currency systems. He has studied and worked in the field of money for more than 30 years in an unusually broad range of capacities including as a Central Banker, a fund manager, a university professor, and a consultant to governments in numerous countries, multinational corporations, and community organizations. He co-designed and implemented the convergence mechanism to the single European currency system (the Euro) and served as president of the Electronic Payment System at the National Bank of Belgium (the Belgian Central Bank). He co-founded and managed GaiaCorp, a top performing currency fund whose profits funded investments in environmental projects. A former

professor of International Finance at the University of Louvain, he has also taught at Sonoma State University and Naropa University. He is currently a Research Fellow at the Center for Sustainable Resources of the University of California at Berkeley. He is also a member of the Club of Rome, a Fellow of the World Academy of Arts and Sciences, the World Business Academy, and the European Academy of Sciences and Arts. Bernard Lietaer has written numerous books and articles about money systems, including *Of Human Wealth* (2012), *Monnaies Régionales* (2008), and *The Mystery of Money* (2000).

Curtis Ogden is a Senior Associate with the Interaction Institute for Social Change (IISC), a collaborative capacity building intermediary based in Boston, MA. He provides consulting services (process design, facilitation, training and coaching) to a variety of large scale multi-stakeholder change and network building initiatives. Much of his work concentrates on food systems, including partnerships with Food Solutions New England, Northeast Sustainable Agriculture Working Group (NESAWG), Chesapeake Foodshed Network, Vermont Farm to Plate Network, Connecticut Food System Alliance, Minnesota Food Charter Network, and the Inter-Organizational Network for Food, Agriculture and Sustainability. He also consults to networks focused on new economics, education reform, public health and environmental conservation, all with an underlying commitment to social equity. Curtis is a regular contributor to the IISC blog. He is also an advisor to a few start-up initiatives focused on addressing structural racism and inequality. He lives in Amherst, MA with his wife and three daughters.

Robert E. Ulanowicz, Ph.D is Professor Emeritus at the University of Maryland Center for Environmental Science, and Courtesy Professor in the Arthur R. Marshall Center at the University of Florida. He is a graduate of the Baltimore Polytechnic Institute and received his Ph.D. in chemical engineering from the Johns Hopkins University. Ulanowicz devoted most of his career to developing methods to analyze ecosystem trophic networks. He has published over 190 papers in network theory,

ecological economics, fisheries, thermodynamics and philosophy/religion. He is the author of three monographs: *Growth and Development* (1986), *Ecology, the Ascendent Perspective* (1997), and *A Third Window* (2009)) and co-author/editor of four others. Ulanowicz is the recipient of the 2007 Ilya A. Prigogine Medal awarded for excellence of research into ecosystem dynamics. He enjoys swimming and gardening and resides with his wife, Marie, in Gainesville, Florida.

Joe Ament, Ph.D. graduated from The Ross School of Business at The University of Michigan, focusing on Economics and Finance. After spending 7 years in corporate strategy in both the for- and non-profit sectors, he spent 3 years writing about the ecological, social, and economic problems we now face. As a Ph.D. student at The University of Vermont, Joe focuses his studies on Ecological Macroeconomics. Specifically, he researches monetary systems for an ecological civilization through the Gund Institute. His interests lie in how monetary systems affect social equality and environmental degradation; and how a resilient civilization will use money and finance to allocate resources, distribute wealth, and live sustainably.

SUPPORTERS

We're grateful for the support and generosity of our foundation partners.

