



Impact Investing

A FRAMEWORK FOR POLICY DESIGN AND ANALYSIS

INSIGHT AT PACIFIC COMMUNITY VENTURES &
THE INITIATIVE FOR RESPONSIBLE INVESTMENT AT HARVARD UNIVERSITY

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About InSight at Pacific Community Ventures

InSight is the thought leadership and advisory practice at Pacific Community Ventures, a US community development financial institution and non-profit organization. InSight has provided research on community development and impact investing to clients including The Rockefeller Foundation, Annie E. Casey Foundation, The California Endowment, and The Federal Reserve Bank of San Francisco, and evaluates the social performance of more than \$1 billion of targeted private equity investments by pension funds including the \$200 billion California Public Employees Retirement System, investment managers including Hamilton Lane, and foundations including the Northwest Area Foundation.



About the Initiative for Responsible Investment at Harvard University

The Initiative for Responsible Investment (IRI) at the Hauser Center for Nonprofit Organizations at Harvard University serves as a platform for dialogue on fundamental issues and theories underlying the ability of financial markets to promote wealth creation across asset classes, while creating a stronger society and a healthier environment. The IRI works across asset classes to build communities of practice around innovative responsible investment strategies and catalyze new opportunities and concepts in responsible investment, promoting the development of the theory and practice of responsible investment through research, dialogue, and action. The IRI is also the home of More for Mission, a resource for foundation endowments who seek opportunities to align their financial investments with their institutional mission.

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that effectively
deliver social
benefit invoke
a strong case
for government
support.



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Errors and omissions are the responsibility of the authors alone.

Preface

The Rockefeller Foundation launched its program initiative on impact investing with an important premise in mind: that the resources of government and philanthropy alone are insufficient to address the world's biggest problems. We have been supporting the development of networks, infrastructure, intermediaries and research designed to accelerate the maturation of an impact investing industry that seeks to create social and environmental benefit in addition to profit. In so doing, our intent has been to unlock more capital for companies, funds and other vehicles that generate positive social and/or environmental outcomes—such as high-quality jobs, healthcare, education and affordable housing, cleaner and more efficient energy—in addition to financial return. We believe that government and philanthropy need impact investors to produce these outcomes at scale—and we also believe that impact investors need government (and philanthropy).

This publication represents a framework for thinking about the role government policy can play in creating an enabling environment for impact investing. This framework is based on, and illustrated by, 16 individual policies in 13 countries. The following document represents a significant contribution to our thinking about impact investing policy, but it is only the departure point for a conversation that must necessarily become more concrete as it finds application in specific impact objectives, sectors and geographies. We look forward to working with IRI, InSight and other partners to refine the framework and use it as a basis for additional research and policy proposals to unlock impact investment.

Margot Brandenburg, Associate Director, The Rockefeller Foundation
Justina Lai, Associate, The Rockefeller Foundation

Navigating the Report

The report is intended for an audience of government officials, advocacy groups, investors, researchers, and funders with an interest in describing and developing policies that catalyze private capital for investment in opportunities with social or environmental benefits.

The report presents a framework for considering the role of policy in impact investing, including three practical references for readers:

→ **A model that illustrates the opportunities for policy intervention in impact investing.**

The model places policies within the context of impact investing market ecosystems, and helps identify specific paths by which policies are intended to catalyze private capital.

→ **Six criteria with which to evaluate the role of policy and its potential effectiveness.**

The criteria have been developed using case studies, literature review, and outreach to impact investing practitioners and stakeholder groups. The criteria provide a practical starting point for designing and researching impact investing policy.

→ **Sixteen case studies serve as examples of concrete interventions that shape and support impact investing markets.**

The case studies draw from a range of issue areas, investment vehicles, and policy mechanisms and help to illustrate the complexity of related issues—socioeconomic, political, bureaucratic, and structural—that influence the outcomes of policy.

Most of the policy examples throughout the report are sourced from the 16 case studies. Policies named in the report, but not drawn from the case studies, are described in more detail in the appendix. Unless otherwise noted, the “\$” symbol denotes US dollars.

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Policy in
impact investing
catalyzes viable
private markets
for social goods.

Executive Summary

There is no market from which government is completely absent, whether as a direct participant providing and purchasing resources, or as an enforcer of standards and rules. Private investments always depend to some extent on the policy mechanisms that make economies viable.

This project focuses not on the general enabling role of public policy in markets—the provision of basic infrastructure and laying down of “the rules of the game”—but on specific efforts to catalyze investment opportunities that yield deliberate and substantial social or environmental benefit. These policies are often designed to correct market failures or spur new activity in underserved areas or innovative themes, and they may depend on interventions that directly subsidize, regulate, or otherwise activate private investment.

WHAT IS IMPACT INVESTING?

Investments intended to create positive impact beyond financial return.

Impact investors want to move beyond “socially responsible investment,” which focuses primarily on avoiding investments in harmful companies, and instead seek to actively deploy capital in businesses and projects that can provide solutions at scale.

For more information on the practice of impact investing, visit:

The Global Impact Investing Network
www.thegiin.org

Investing for Social and Environmental Impact
www.monitorinstitute.com/impactinvesting

Impact Investments: An Emerging Asset Class
www.jpmorgan.com/directdoc/impact_investments_nov2010.pdf

The Purpose of this Research

How can policymakers, investors, and civil society better evaluate and develop impact investment policies? In this report, we draw on case studies and direct outreach to practitioners to build an analytical framework for addressing this key question.

The report presents three tools in order to lay the groundwork for future research and analysis of specific policy interventions:

- A model for locating the role of government in impact investing markets;
- Sixteen case studies providing detailed insight into a range of policies from around the world and
- A set of criteria providing a practical starting point for the design and evaluation of policy.

This research is an introductory approach to impact investing policies and focuses broadly on their shared characteristics. The next critical step for researchers is to identify when and what impact investing policy(ies) might be justified in specific markets and how to apply the framework in those instances.

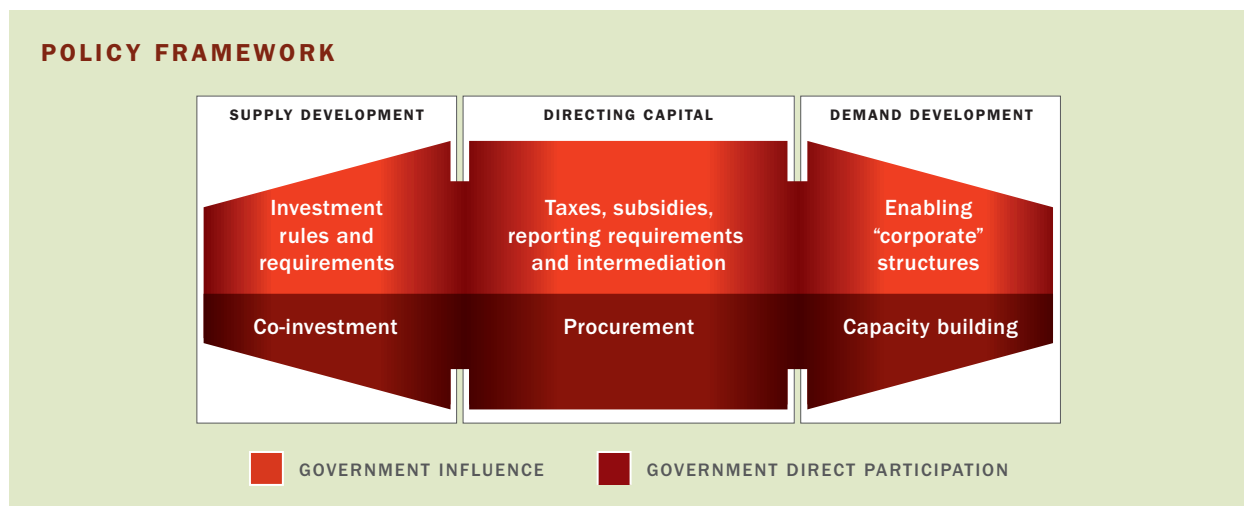
Locating Policy in Impact Investing Markets

We can view impact investing as a subset of financial markets generally. There is a supply side: the providers of capital, including governments, individuals, foundations, banks, investment, and retirement funds. There is a demand side: the companies, cooperatives, projects, and other vehicles in need of capital. And there is a market in which exchange occurs, where rules govern the terms of trade and buyers and sellers set prices.

Policy in impact investing may be understood as intervening at one or more points in this cycle:

- Increasing the amount of capital for investment (supply development);
- Increasing the availability or strengthening the capacity of capital recipients (demand development); or
- Adjusting terms of trade, market norms, or prices (directing capital).

In each of these—supply, demand, and direction—government can participate directly in the market or influence impact investing through policy or regulation, as the model below demonstrates.

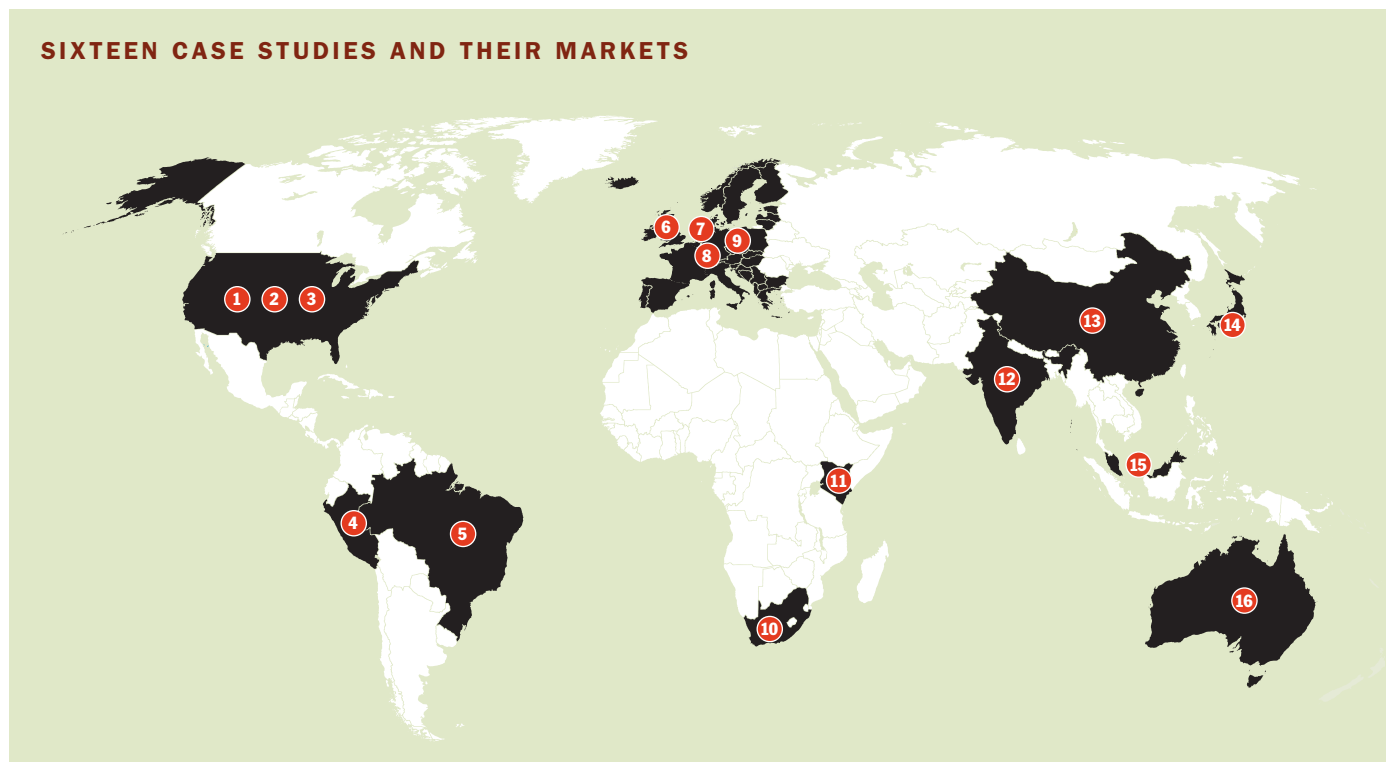


The model can be used either to situate a given policy within the broader ecosystem of enabling infrastructure for impact investing, or as a departure point for exploring new or different policies and regulations designed

to accelerate and effectively direct inflows of capital. Once we understand how and to what purpose policy intervenes, we can begin to consider its actual or likely effectiveness.

Case Studies

There are many thousands of policies that influence impact investors in some manner globally. We present 16 case studies that reflect some of the field's diversity of geography, issues, policy method, and intention. Around half of the policies more directly intervene in what we describe as impact investing markets, and half provide an ancillary support to impact investing markets as one component of a wider objective.



- 1 US**
New Markets Tax Credit: Tax credit for investing in qualified community development vehicles
- 2 US**
CDFI Fund Program: Certifies and supports a discrete category of community-based financial institutions
- 3 US**
Energy Star Program: Certification program identifying energy-efficient products and facilities
- 4 Peru**
Multi-fondos: Provides greater flexibility for domestic pension funds to invest in SMEs through private markets

- 5 Brazil**
Clean Development Mechanism (CDM): Tradable credits for projects that reduce global emissions
- 6 UK**
Community Interest Companies: New legal form facilitating investments in for-profit entities with a social purpose
- 7 Netherlands**
Green Funds Scheme: Tax credit for investors in certified investment funds targeting environmental projects
- 8 Germany**
Feed-in Tariffs (StrEG and EEG): Minimum, mandated prices for renewable energy

- 9 EU**
Joint European Support for Sustainable Investment in City Areas (JESSICA): Capital and guarantees promoting collaborative sustainable development in Europe's urban areas
- 10 South Africa**
Broad-Based Black Economic Empowerment: Government procurement favoring black-owned businesses
- 11 Kenya**
Microfinance Act: Applies capital requirements and regulatory oversight to depository MFIs in Kenya
- 12 India**
Priority Sector Lending: Regulation requiring a fixed percentage of lending in underserved and target markets

- 13 China**
National High-Tech R&D (863) Program: Government investment in high-priority economic sectors including for environmental protection and renewable energy
- 14 Japan**
Tokyo Cap and Trade Program: Cap on CO₂ emissions from offices and factories in Tokyo and a market for trading credits
- 15 Malaysia**
Corporate Social Responsibility Disclosure: Regulation requiring disclosure of corporate social responsibility information by publicly listed companies
- 16 Australia**
National Rental Affordability Scheme: Tax credit for investment in affordable housing

Each case study provides a narrow window into policies that affect impact investing. Policies have different objectives, operate in different national and market contexts, and in many instances affect impact investing as an unintended consequence. Yet each case study provides insight into the critical details of government activity and tells the story of a concrete intervention in its own right.

Evaluating Policy in Impact Investing

It may be useful to break down elements of a policy's effectiveness into core characteristics that address how a particular intervention may activate the desired private market activity. Here we provide a general set of six criteria to assess and develop potential policy.

The six criteria are key findings drawn from the case studies in this report and provide rules of thumb for considering the performance of impact investing policies. The criteria are also consistent with the needs of investors uncovered during our outreach to practitioners and described in the literature.

The criteria are an important lens through which to consider impact investing policy. Although we do not intend the criteria to be determinative, they do provide a set of general principals to guide readers:

SIX CRITERIA TO DESIGN AND ASSESS POTENTIAL POLICY

Targeting: The focus of a policy must be carefully matched to its objectives. The more narrowly a policy is targeted, the more likely it is to catalyze a discrete social or environmental outcome. A broadly targeted policy may create an environment in which impact investing more readily occurs, on a larger scale, but will likely lead to some “mission drift” as investors search out the most profitable opportunities from a greater universe of options.

Transparency: Transparency in the substance and mechanism of policy is important for investors, and is likely to be an important factor in determining market participation. In particular cases where information disclosure is the mechanism of policy, the closeness of fit between disclosed information and investment decision also has a direct bearing on investor behavior.

Coordination: A policy is likely to be more effective if it works in coordination with existing policies and markets to leverage their effectiveness. Although government has a role to play in rapidly advancing the field, small steps forward that build on established infrastructure may be more suitable than bold but isolated innovations.

Engagement: Engagement with impact investors is important for clarifying needs. Investors are less likely to support a policy, and to therefore ensure its effectiveness, if it is conceived of and created absent dialogue with current or prospective sources of capital. This may be especially true where policies impose behavioral changes, or where an otherwise welcome concept might fail in practice because of poor design or implementation.

Commitment: Commitment to a policy should be consistent with the need. Different markets require different levels of real or presumed commitment to a policy from government, in duration, scale, and enforcement. Consistency of a commitment, when it is necessary, alleviates investor uncertainty. However, when government is no longer needed to sustain a market, continued intervention is likely to exacerbate inefficiencies.

Implementation: An institutional context and infrastructure that supports efficient implementation and modification is critical to success. When the specific provisions of a policy hamper its delivery, the capacity of government to respond quickly to a demonstrated need for adjustment is an important determinant of effectiveness.

The Way Forward

Whether government provides direct financial or institutional support, or influences markets through laws and regulations, the effectiveness of impact investing policies is in creating viable private markets that support the creation of social goods efficiently, and potentially at greater scale. For example, in the case of the CDFI Fund in the United States, it is estimated that for every \$1 of government aid, \$20 is invested in low-income communities.

Where private capital seeks financial return in markets with intentional social or environmental benefits, there may be an opportunity for government to realize a policy objective by supporting impact investing.

This report makes no recommendations on when, specifically, impact investing policy might be justifiable, or on how to apply the framework. That question must be answered in the context of the country environment, issue area needs and challenges, and investment infrastructure of a particular market. Rather, the report will help policymakers and advocates consider options for intervention, and design and implement policies more likely to create viable markets for impact investing.

Impact investing has the potential to provide government with a powerful delivery mechanism for social goods. This report clears the path for the next critical steps in policy innovation and development.

II. About This Research

In 2010, InSight at Pacific Community Ventures partnered with the Initiative for Responsible Investment at Harvard University on the Global Impact Investing Policy Project.

The Project, supported by the Rockefeller Foundation, follows and benefits from a body of recent work describing and advancing the field of impact investing, defined in the broadest terms as investment made with the intent to create social or environmental benefit in addition to financial return.

Public policy is intimately involved in shaping impact investing markets, from regulations governing how investors deploy capital, to mandates for specific social and environmental provisions within markets, to support and subsidy for identified public goods. As the 2009 report, *Investing for Social and Environmental Impact*, described it: “Policy mechanisms have the potential to change the underlying risk-return tradeoff and address structural barriers” and “may be a critical lever to motivate massive amounts of capital to engage in impact investing.”¹

The Global Impact Investing Policy Project is an effort to clarify the role of public policy in impact investing and to help stakeholders from the investment, government, advocacy, research, and related communities better identify and support policies that may lead to more robust and effective impact investing markets.

This report is the first in a series that the Global Impact Investing Policy Project will publish in the coming years exploring the framework described below in the context of various country environments and groups of investors. We hope this report helps further dialogue and leads to concrete action in leveraging private capital for public purpose.

Project Development

We have taken an applied approach to the subject matter, focusing on real-world policies and their impact in different national contexts. The process has included:

- Background research, including literature review and consultation with more than 30 expert practitioners;
- Engagement with stakeholder networks;

¹ Jessica Freireich and Katherine Fulton, “Investing for Social and Environmental Impact.” (New York: Monitor Institute, January 2009), 66, 68.

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- Creation of a global database of hundreds of impact investing policies, which we define as those with an objective or outcome, primary or ancillary, of lowering barriers to, or otherwise catalyzing, investment for social and environmental benefit;
 - A policy and impact investing workshop held on June 22nd, 2010, at Harvard University, supported by the Annie E. Casey Foundation;
 - Sixteen detailed policy case studies; and
 - Analytical development of the framework and criteria.

The case study-driven analysis made concrete a set of shared characteristics, variables, and questions that are crucial to analyzing impact investing policies. In summary, the research frames key issues in policy evaluation and development, including:

- The justification and opportunities for impact investing policies;
- The range and role of policies available for consideration; and
- The means to evaluate the effectiveness of policy intervention.

Scope and Limitations

The inherent limitations of examining just 16 policies in detail, and doing so without conclusive evidence of impact in many cases, has helped determine the scope and limitations of our research.

The findings in the report speak to policies implemented as *direct* interventions, created with the intent to shape or influence private markets in support of social or environmental objectives. Half of the case studies meet this criterion. The other half have an *indirect* influence, shaping impact investing opportunities as an intended or unintended ancillary consequence, but they nonetheless shed light on direct interventions. Note that the line between direct and indirect influence, like the line between policy methods and objectives, is necessarily blurry.

We also focus on policies that are primarily national in scope, for the most part looking beyond the efforts of international bodies and agencies that are themselves some of the most active investors in social and environmental impact, such as the World Bank or International Finance Corporation. Nevertheless, we believe our focus on the work of national and subnational governments presents a rich diversity of market environments for informing an analysis with broader applications, including for international institutions.

Although the framework and case studies we present in this report offer a market-centered approach to analyzing complex and idiosyncratic policy environments, the report includes no primary measurement of results. Rather, it provides an overview of policy mechanisms for shaping markets and lays the groundwork for more in-depth analysis of impact investing policy ecosystems.

This research is an introductory scan of impact investing policies and their shared characteristics. We did not seek to develop a conclusive method for identifying when, specifically, impact investing policy might be justified and how to design it. Considerable research remains to be done, not least on specific impact investing issue areas and markets, on categories of investment vehicles and investors, and on the national and international contexts in which policies operate. The report presents a set of analytical exercises to inform and advance these efforts.

III. Introduction

Impact investing, broadly defined as investment made with the intent to create social or environmental benefit in addition to financial return, is important to government because it enables finite public resources to leverage much larger sums of private capital in pursuit of solutions to major problems. If impact investments deliver social benefit effectively and efficiently, they invoke a strong case for more nuanced and explicit government intervention.

Of course, not all policies will achieve their goals, and to the extent that they subsidize or mandate the inferior delivery of public goods, or undermine the benefits of the markets they are meant to catalyze, impact investing policies should be rejected. A key concern of policymakers and advocates, then, is a clear method to think through the potential benefits and costs of specific impact investing policies, and to relate those considerations to concrete private market outcomes.

Put simply, policy in impact investing will adjust one or more of the variables that determine an investment's attractiveness—including mitigating risk, enhancing return, or reducing transaction costs—regardless of the target market or vehicle.

Examples of impact investing markets, and the policies that have created and sustained them, include:

- The \$24 billion market for equity and debt investments in low-income communities in the United States driven by Community Development Financial Institutions registered and supported by the U.S. CDFI Fund and other related policies including the New Markets Tax Credit and Community Reinvestment Act;
- The construction of 40,000 new subsidized residences for low- and middle-income families in Australia as a result of the recently implemented National Rental Affordability Scheme;
- More than \$27 billion in capital directed in 2009 to Indian borrowers in underserved or target sectors by banks under the country's Priority Sector Lending regulations;
- Investments of more than €6.8 billion (\$9.6 billion) in 5,000 environmental projects in the Netherlands through "Green Funds" created by government tax credits and exemptions;
- \$1.5 billion of direct investments in carbon emissions mitigation in Brazil, where the government has developed national infrastructure and capacity to support the implementation of the Kyoto Protocol's Clean Development Mechanism.

IV. The Role of Government in Impact Investing

The policy framework we develop in this project focuses specifically on policies that catalyze private market activity that creates demonstrable social or environmental benefits, beyond what we might expect from normal market activity. This relatively narrow scope excludes the wide range of enabling legislation that allows for ordered capital flows, banking and investor regulation, legal redress, property rights, market transparency and oversight, and so on.

The need specifically for impact investing policies rests on two related propositions:

- The private market alone often does not fully promote, and sometimes may prevent, investments with important social and environmental benefits; and
- Despite this, private markets can be an appropriate tool to address particular social and environmental challenges.

Thus, the first question advocates should ask is: Is the problem in question one that calls for a policy intervention that is focused on supporting private market interventions to create public goods? If private markets currently result in suboptimal social and environmental outcomes, but with support from government could become an efficient tool to improve performance, then the answer is yes.

The justification for policy intervention may rest on a variety of ideas about the imperfect performance of markets. Among the arguments that advocates may make:

- **Structural barriers lead to underprovision of important social goods:** For example, real estate markets and land use constraints may lead to a lack of affordable housing, or high costs of small enterprise finance in emerging markets may leave a gap in economic development;
- **Private market actors may externalize negative costs onto society:** For example, carbon (and other) emissions are unpriced and thus contribute to global warming and its consequent environmental, social, and financial costs;
- **Investors may not capture positive externalities:** Environmentally sustainable, healthy, and socially equitable communities create assets that benefit society but do not necessarily provide private benefit to investors;

-
- **Information asymmetry and uncertainty constrains market development:** Investors may overestimate risk on the basis of poor or biased information about areas or communities, and uncertainty about the future may inhibit the flow of private capital to emerging markets and bottom of the pyramid investments;
 - **New investment sectors lack track records:** Promising areas of development, such as alternative energy production or energy efficiency investment, may involve higher-risk investments with relatively short track records, limiting private capital investment that could bring these fields to scale.

In each of these cases, public policies might be designed to directly subsidize, mitigate risk, create better information, or support upfront capital flows, in an effort to spark private market activity in support of specific public goals that otherwise would not take place.

That such policies do not yet exist may be the result of political barriers to creating policies to redress these market imperfections. Debates over the role of government in investment markets, exposure to political risk by implementing policies targeting specific segments of society or economic sectors, or resistance from current market participants opposed to particular changes may reduce the incentive for public officials to embrace policy change. The structure of government agencies and legislative systems may create roadblocks in considering policies that run across or between existing bureaucratic boundaries.

Advocates put forward a number of potential reasons to support private market activity, either in addition to or in place of direct government support, to achieve specific social and environmental goals. These include:

- **Leverage:** Well-designed impact investing policies may leverage private capital at a scale otherwise unavailable from exclusively public sources.
- **More nimble activity:** Private sector actors may act more quickly than larger public bureaucracies and may be more responsive to market opportunities.
- **Investment discipline:** Private investment may be thought to provide financial discipline and long-term stability for organizations that might not otherwise grow to be independent from subsidy.
- **Long-term sustainability:** Policies that support private-sector development may create investment ecosystems that last beyond the immediate and possibly short-lived priorities of any particular political administration.
- **Market signaling:** Impact investing policies can leverage activity beyond targeted actors by highlighting directions that the public sector is willing to commit to, leading other sources of private capital to take voluntary action broadly aligned with the policy objective.

In each of these cases, direct public intervention alone may lack the benefits from private market activity. The insight from the impact investing policy space is that the public sector can direct private market activity to more socially beneficial uses in a way that builds on, rather than stifles, the benefits we described above. Careful consideration is necessary to determine in which instances this is the most effective path forward.

We caution that impact investing policies, if they favor private market activity blindly, may undermine the delivery of public goods that governments are designed to provide by pooling risk and distributing benefits more broadly. A baseline assumption for impact investing policies must be that they offer an effective mechanism for creating social benefits; increased economic activity or financial returns in a particular sector are, on the face of it, inadequate justifications for intervention. Fundamental considerations of equity and other national priorities should remain paramount in policy design.

A range of potential problems with impact investing policies offer some guidelines of how to think about their potential value, and add some caution in designing a role for government. For instance, poorly designed policies might:

- Subsidize private market activity that is already taking place;
- Protect inefficient or socially suboptimal enterprises from competition;
- Create overly high transaction costs in order for investors to participate;
- Fail to address the real barriers to private market participation;
- Reduce the resources available to public or private-sector actors to achieve other goals;
- Pull time and resources away from more effective policy development.

Note that each of these cautions offers a frame of reference for designing effective policies. As advocates, investors, and public officials think through potential impact investing policies, they must balance the regulation and dynamism of private market activity. The end goal, of course, remains the same: promoting the most efficient means to achieve explicit public goals.

It is impossible to make these considerations in isolation from the broader policy, regulatory, advocacy, and investment environments in which impact investing policies will inevitably reside. As in any other arena, impact investing policies have to be politically viable in order to be enacted, require effective governance in order to achieve their goals, and perhaps most importantly, require an engaged investment ecosystem that can take up public support and translate it into concrete investments that create demonstrable social or environmental benefits.

V. Locating Policy in Impact Investing Markets

Policies can affect impact investing markets in a number of different ways, whether by design or as an unintended consequence, at all points in the investment cycle. Understanding how policy interacts with private capital markets to increase the supply, demand for, or direction of capital, is crucial for impact investors navigating markets as well as policy developers and other stakeholders.

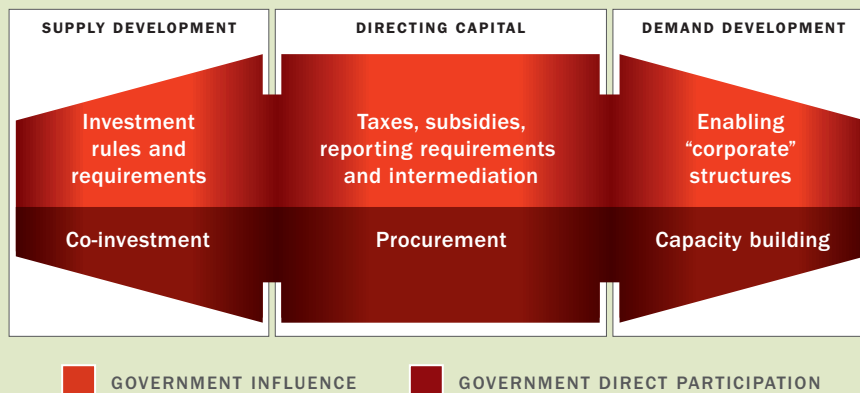
A Model of Policy Intervention

We can group impact investing policies into three broad categories linked to the way they intervene in capital markets. These three interventions cover a wide variety of potential policies and impact areas, and align with the broadest aspects of a financial ecosystem: increasing the supply of capital from investors including governments, individuals, foundations, banks, and investment and retirement funds; increasing demand from the companies, cooperatives, projects, and other vehicles in need of capital; and directing capital toward impact investments at the point of exchange, where rules govern the terms of trade and buyers and sellers set prices.

The role a government chooses to play in a policy intervention may be as a direct participant in the market, contributing resources like any other investor or consumer, or as an outside influence, through regulation or by building the infrastructure necessary for impact investments and markets to grow. Governments have a wide variety of tools and can play an influential role in shaping and expanding the market for impact investing.

The following model illustrates the broad types of policies that emerge when we look at the role the government plays and the three types of broad policy interventions.

POLICY FRAMEWORK



As the model suggests, the capacity of government to affect impact investing markets is wide-ranging and spans a variety of actions from traditional regulatory legislation, to the creation of co-investment opportunities, to procurement, and to general technical assistance and education for new industries. Whether increasing the supply of capital, directing existing capital, or increasing demand for capital, the policies change the investment environment and influence the decision-making processes of investors by adjusting one or more of the variables that determine a market's attractiveness, including mitigating risk, enhancing return, or reducing transaction costs.

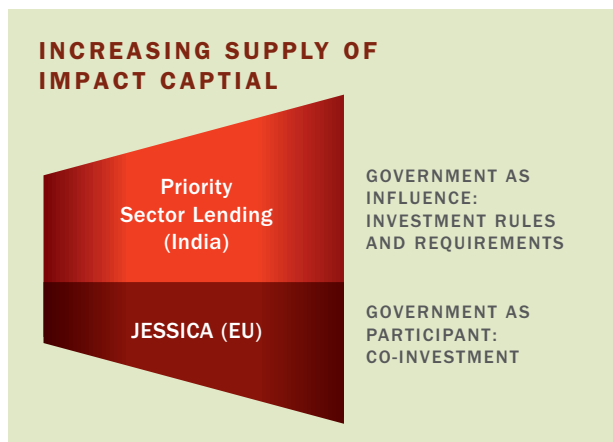
It is important to note that policies may not always fit neatly into one box or the other. The CDFI Fund in the United States (see appendix), for instance, involves multiple layers of supply and demand. It builds capacity for financial intermediaries; the demand-side consumers of impact investing capital. It increases the supply of capital; making direct investments in investors that channel public and private capital to social impact. Finally, it administers the New Markets Tax Credit (see appendix); adjusting the risk and return parameters of specific markets.

The lines that we have drawn between each policy type are also malleable. In particular, it can be difficult to distinguish the difference between supply development and directing capital. In general, we use supply development to mean an increase in the overall supply of impact investing dollars, whereas directing capital refers to a shift of existing capital toward impact investments. A policy that directs capital will tend to function at the point of exchange. Without a transaction, there would be no government intervention, as in the case of public sector procurement or a tax credit. Policies that develop supply tend to increase the volume of impact investing capital at an institutional level, and in the preinvestment phase of the market cycle.

Supply Development

Supply development policies increase the amount of impact capital. Policies dealing with investment rules or requirements, and policies that provide co-investment, increase the supply of impact investing capital by mandating such investment or by enticing investors through risk-sharing with government. Examples of policies that increase the supply of impact investing capital include:

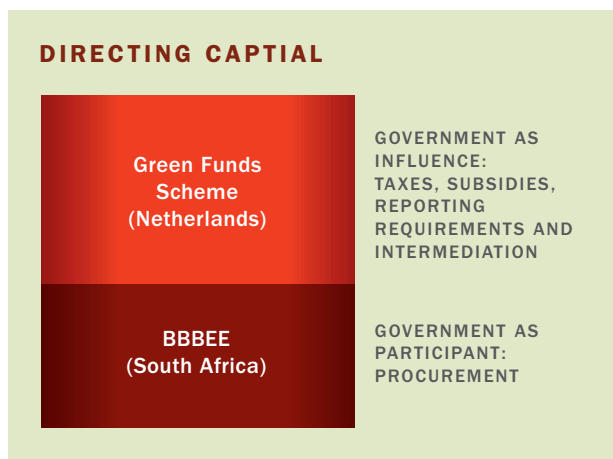
- **Priority Sector Lending** requirements in India, which are mandated targets for lending in underserved markets set by the Reserve Bank of India and applicable to all banks operating in the country;
- The EU's **JESSICA** program, which uses a public-private partnership funding model to support large, integrated, sustainable urban development projects; and
- The US Small Business Administration's **New Markets Venture Capital Fund** program, which catalyzed the creation of six privately operated equity funds for investing in small companies in low-income communities using direct funding and operational assistance.



Directing Capital

Policies directing capital change the way existing investments are made in the capital markets, shifting more toward impact opportunities. Policies that direct existing capital change the perceived risk and return characteristics of impact investments by adjusting market prices and costs and improving transaction efficiency and market information. Examples of policies that direct capital toward impact investments include:

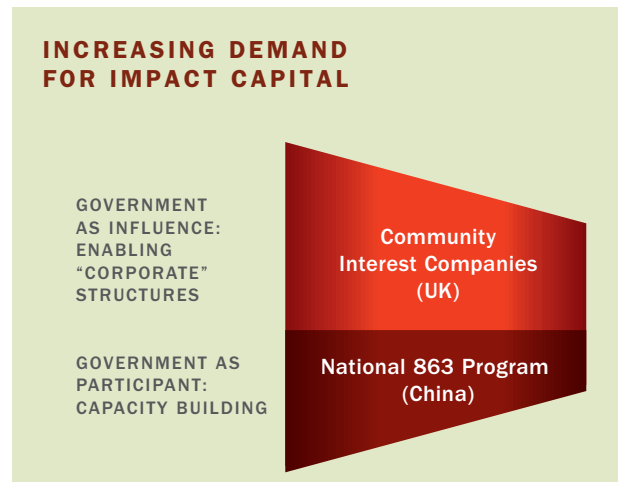
- The **Green Funds Scheme** in the Netherlands, which provides a tax credit for investors in certified investment funds targeting environmental projects;
- The **Broad-Based Black Economic Empowerment Act** in South Africa, which mandates that all government procurement contracts give preferential treatment to black-owned businesses; and
- **Climate awareness bonds** in the EU, which the European Investment Bank issues to finance projects supporting climate change protection.



Demand Development

Demand development policies increase the demand for impact capital. Policies that build demand include those that build institutional capacity, create enabling structures, and contribute generally to the development of impact investment-related projects and capital recipients. Examples of policies that build demand for impact investments include:

- **Community Interest Companies** in the UK, a new corporate legal form to facilitate the development of and investment in social enterprises;
- **National High-Tech R&D (863) Program** in China, which readies high-priority economic sectors for private capital, including in the areas of environmental protection and renewable energy; and
- **Cadenas Productivas** (Productive Supply Chains) in Mexico, which provide small businesses with technical assistance, training, and access to receivables financing that would otherwise be prohibitively expensive or unavailable.



Determining where the market has shortcomings and identifying the appropriate forms of policy intervention are two important questions for impact investing policy development and assessment. Although the model above provides an important starting point, it does not identify when, specifically, impact investing policy might be justifiable, and in what form. That question can only be answered in the context of the unique country environments, issue area needs and challenges, and investment infrastructures of a particular market. The next step in policy development is coming to a clear understanding of the problems or opportunities, complexities, and the appropriate point of policy intervention, in impact investing markets of interest.

VI. The Investor Perspective: Issue Areas of Impact

Impact investors may choose, for the sake of affinity or efficiency, to organize their work according to issue areas. They may care about achieving outcomes in a particular area of impact, or find value in specialization. Regardless of strategic alignment, however, all investors share a fundamental interest in market stability, transparent information, and institutional infrastructure. To the extent that policy interventions produce consequences for investors on these and other critical dimensions of risk and return, investors must understand and respond to changes in the market.

IMPACT AREA AND OBJECTIVE

Agriculture: Environmentally and socially sustainable agricultural production and food systems

Housing & Community Facilities: Access to quality and affordable housing, sustainable and accessible community facilities

Financial Services: Financial inclusion for marginalized individuals and industries and small/micro enterprises

Education: Quality education and academic opportunity for all students

Health: Expanded access to basic, low-cost preventive and treatment services, particularly among poor and rural populations

Environment: Conservation of natural resources, reduced threats to biodiversity, reduced pollution

Energy: Expanded access to clean energy technologies, reduction of carbon emissions, and climate change mitigation

Water: Access to safe drinking water and sanitation, particularly for poor and vulnerable populations; water conservation

Source: IRIS

Drawing on the Global Impact Investing Network's (GIIN) Impact Reporting and Investment Standards (IRIS) project, and on a market-sizing study copublished by JP Morgan Social Finance, the Rockefeller Foundation, and the GIIN, the adjacent table introduces eight key areas of impact identified by investors working to define the field. To the extent that policy interventions related to a particular area of impact produce consequences for investors, an analysis of how policy affects investment opportunities and outcomes may be useful.

Using the analytical framework presented in the previous section, we briefly examine three policy issues that correspond to the impact areas that IRIS identified. Within the scope of a narrowly defined policy problem, we discuss ways in which policy shapes the investment landscape for impact capital.

Applying the Model of Intervention

Affordable Housing

Policy problem: The private market provides inadequate housing for low- to moderate-income people in some areas. Given the problematic risk and return characteristics of the affordable housing asset class, policy intervention may be able to ensure that the private sector receives a more attractive investment opportunity.

Impact investing policies can affect markets and encourage the creation of additional affordable housing in a number of ways. They can:

- **Increase the supply** of capital for affordable housing by mandating that private investors deploy capital to low-income markets, as in the Community Reinvestment Act in the US, and by investing public funds alongside private monies in order to overcome initial barriers to investment and build confidence.
- **Direct capital** toward affordable housing developments by changing the cost structure of housing investment through, for example, density bonuses tied to the provision of affordable housing, or tax credits such as the National Rental Affordability Scheme in Australia. The government can also reduce transaction costs for investors by developing intermediaries specializing in affordable housing finance.
- **Increase demand** for affordable housing investment by providing technical assistance support for community development organizations involved in affordable housing developments.

Alternative Energy Production

Policy problem: Despite the potential for market-rate returns over the long run, private investment in alternative energy production has been insufficient to drive substantial expansion beyond the new technology stage. Policy barriers to investment, including policy uncertainty and grid access, can be dismantled to make way for private capital, whereas patient capital from government can fill in the capital gap in early-stage research and product development. Policymakers can:

- **Increase the supply** of capital by reducing investor uncertainty in the future of alternative energies. For example, concrete fuel-switching goals signal public commitment to new technologies.
- **Direct capital** by creating incentives for investment in alternative energy, such as the feed-in tariffs in Germany, guaranteed grid access, and favorable purchase pricing policies.
- **Increase demand** for capital by building innovation capacity through public investment in R&D, as China has done in its High-Tech 863 program. Strong legal frameworks for intellectual property and knowledge transfer can lower barriers to innovation.

Sustainable SME Finance

Policy problem: Lack of market information and an unfavorable risk profile have resulted in underinvestment in small businesses with the potential for high social and financial returns. Although there is some debate as to whether investment in small and medium enterprises (SMEs), in itself, constitutes impact investing, instances in which small enterprise is the only viable source of employment and job creation in severely economically distressed areas offer at least one compelling example of the potential for social benefit. Depending on the nature of the business, the social and geographic context, and other constraints on financial access, classifying SME finance as impact investment might be more or less appropriate. Policy frameworks can improve financing opportunities for small businesses:

- **Increase the supply** of capital by removing restrictions on financial institutions seeking to place capital, forcing the market to invest in small business development, and increasing patient capital by investing public funds in vehicles that focus on sustainable enterprise development.
- **Direct capital** to SMEs through tax incentives and other public support for financing intermediaries that support developing enterprises, such as microfinance institutions (MFIs), and through direct purchasing and procurement provisions that favor small business. Invest in systems that improve information about credit risk and investment performance.
- **Increase demand** for capital by increasing the number of investment-ready projects through capacity-building and technical assistance to small businesses.

The following table provides examples of policy interventions that affect markets for impact capital within the policy issues we described above:

POLICY PROBLEM	SUPPLY DEVELOPMENT	DIRECTING CAPITAL	DEMAND DEVELOPMENT
Affordable Housing	<ul style="list-style-type: none"> → Community Reinvestment Act (US) → HOME Investment Partnership (US) → HOPE VI (US) 	<ul style="list-style-type: none"> → National Relief Affordability Scheme (Australia) → Section 8 Vouchers (US) 	<ul style="list-style-type: none"> → NeighborWorks America (US) → Sustainable Communities Initiative (US)
Alternative Energy Production	<ul style="list-style-type: none"> → Renewable Portfolio Standards (multiple) 	<ul style="list-style-type: none"> → Feed-in-Tariffs (Germany) → RE Production Tax Credit (US) → Clean Development Mechanism (Brazil) 	<ul style="list-style-type: none"> → NeighborWorks America (US) → Sustainable Communities Initiative (US) → National High-tech R&D Program (China)
Sustainable SME Finance	<ul style="list-style-type: none"> → Multi-fondos (Peru) → Priority Sector Lending (India) → Community Reinvestment Act (US) 	<ul style="list-style-type: none"> → Microfinance Act (Kenya) → Procurement Provisions (multiple) 	<ul style="list-style-type: none"> → Cadenas Productivas (Mexico) → Technical Assistance Programs (multiple)

VII. Criteria for Evaluation

Once we have established the intended role and location of a policy, it is useful to break down elements of effectiveness into core characteristics that address how a particular intervention may activate private market activity.

The applied, case study-driven approach in this report, together with our broader review of policy and outreach, has led us to a framework of six practical criteria to help assess the likelihood that a newly enacted policy will succeed in catalyzing private capital, and to better anticipate and understand barriers that might arise. The framework can also be used to identify opportunities to build upon and strengthen the performance of existing policies and market infrastructure.

The criteria are key findings that we have drawn directly from the case studies. Together they provide policymakers and advocates with some rules of thumb for considering the balance of opportunities in impact investing. The criteria can be applied to the practical considerations of motivating private market capital in the service of public benefits.

SIX CRITERIA TO DESIGN AND ASSESS POTENTIAL POLICY

Targeting: The focus of a policy must be carefully matched to its objectives

Transparency: The detailed substance and mechanism of policy should be known to investors

Coordination: A policy is likely to be more effective if it builds on and leverages existing policies and markets

Engagement: Up-front and ongoing engagement with impact investors is important for clarifying needs and building support

Commitment: The level of real or presumed commitment to a policy from government, both in duration and resources, should be consistent with the need

Implementation: An institutional context and infrastructure that supports efficient delivery and modification is critical to success

Targeting

A policy directed to a specific social or environmental outcome, a particular investor group or vehicle, or a priority geographic market is more likely to affect its intended target if it has a narrower focus. A broadly targeted policy may create an environment in which impact investing more readily occurs, and at greater scale, but is less likely to affect a narrow outcome or create a discrete social or environmental benefit.

Private investors have an array of investment opportunities to select from, of which the government-prioritized vehicle or market is just one. If a policy is more broadly targeted, and affords investors the flexibility to support investments in multiple markets or vehicles, an investor will typically select the opportunity with the most attractive risk, return, and diversification characteristics, even if it operates at cross-purposes to the government's objective.

There is always a trade-off in policy targeting. A more narrowly targeted policy may have a more limited impact than other policy options and may be more difficult to implement, with a smaller constituency of beneficiaries. A broader policy can have significant impact and be easier to implement and scale, but may disproportionately benefit individuals outside the intended population. Poorly targeted and inadequately

designed policy may lead to crowding out of intended beneficiaries, mission drift, and "green-washing," ultimately diluting the impact benefits of the intervention.

The targeting of a policy also extends to ensuring that government takes the right approach to a market need. Government must clarify whether there is a supply-side gap or a demand-side gap, or if the inherent risk, return, and other characteristics of the asset class demand subsidies or other interventions to make the investment more attractive than others.

SAMPLE POLICIES:

Green Funds Scheme, Netherlands

The policy is highly targeted, supporting a specific type of investment vehicle that requires certification and must demonstrate ongoing compliance for the purposes of providing investors with tax credits and exemptions. The policy has succeeded in catalyzing significant volumes of investment in its target area.

Priority Sector Lending, India

To the extent that Priority Sector Lending attempts to direct private banking capital in India to underserved markets, particularly in the agricultural and small business sectors, flexibility in the regulations has allowed banks to continue to lend to the most profitable borrowers within priority sectors, likely limiting the policy's social effectiveness.

Transparency

Transparency ensures that investors have sufficient, detailed data to make informed decisions about resource allocation and investment. When policy seeks to motivate private capital, the need for transparency applies both to the content of a policy and to the mechanics of its implementation. The greater the clarity of the policy and the more investors feel that they understand all aspects of it, the more likely they are to take known risks.

Transparency also includes ensuring that impact investors clearly understand how to access any benefits resulting from the policy and demonstrate compliance against the government's objectives.

Moreover, when transparency itself is the mechanism of government intervention, as in policy that mandates any form of disclosure, the substance of the disclosed information is an important consideration. To the extent that disclosed information is directly applicable to investment decisions, the policy will be more likely to have an effect on impact investing markets. Disclosures that are poorly matched to an investment decision are unlikely to catalyze significant deployments of capital.

Coordination

Policy does not exist in isolation and is just one component of the market ecosystem into which it is introduced. This includes myriad other government interventions and an established investment infrastructure. The more a policy is contextually appropriate, the more likely it is to be effective.

As the framework demonstrates, there is a need in impact investing for a supply side, a demand side, and a robust market for exchange. If any of these are missing, a policy is unlikely to catalyze a viable impact investing opportunity.

Here, as with all criteria, governments have a choice. Existing, effective institutions and policies are an invaluable asset, whereas ineffective or disinterested actors and infrastructure may undermine a policy's effectiveness. Although government has a role to play in advancing the field, it is important to consider whether small steps forward that leverage existing structures may be more suitable than bold but isolated innovations.

SAMPLE POLICIES:

Corporate Disclosure, Malaysia

The disclosure by listed companies of corporate social responsibility activities is considered to be too general to influence investment decisions. The disclosure requirement is also voluntary, and most believe that it has been ineffective.

Energy Star Labeling, US

Seventy percent of consumers are aware of Energy Star, indicating that the label has been successful in shaping consumer behavior, including of large purchases in areas such as residential and commercial property. However, few investors use the label as an investment screen because the information is not the rigorous, detailed data that they require in this area.

SAMPLE POLICIES:

CDFI Fund, US

The CDFI Fund has succeeded primarily because it supports institutions that themselves benefit from other significant incentives, including the New Markets Tax Credit, the Low-Income Housing Tax Credit, and concessionary sources of capital from investors including banks motivated by the Community Reinvestment Act and foundations with an advantageous tax status.

JESSICA, EU

The impetus for the development of JESSICA was a desire to leverage and build on European Investment Bank loans for sustainable urban development. Given the scale of the project at hand, creating a program to bring in private investment that builds on existing publicly supported programs increases opportunities for success.

Engagement

Policies that work within the context of investor decision-making should ensure that they respond to the very particular and precise needs and constraints of targeted capital providers. This is not to imply that a policy must have investor support to be effective, but rather that engaging investors is one way to ensure appropriate,

SAMPLE POLICY:

National Rental Affordability Scheme, Australia

Although the policy has met its modest initial targets, it has yet to accomplish the government's ultimate objective: the creation of a new class of institutional investment in affordable housing. This is due partly to poor outreach. Investors like pension funds remain altogether absent from the market because of concerns that could have been preemptively alleviated before enactment.

user-oriented policy design, particularly when a proposed policy imposes behavioral change. Prior to and during enactment, it is helpful if government engages with the private individuals and institutions that it expects to make the impact investments.

Investors are less likely to leverage the provisions of a policy, and to therefore ensure its effectiveness, if the policy is conceived

of and created in a manner ill-suited to an investor's purposes, regardless of whether the government's ultimate objective is one that they support. Up-front and ongoing engagement is one way to ensure that a policy is imposed in the most effective manner possible.

Engagement also extends to government outreach to other stakeholder groups, including investment recipients, political interests, and bureaucracies. The support and alignment of a broad range of market participants is essential.

Commitment

Different markets require different levels of real or presumed commitment to a policy from government, in duration, scale of resources, and enforcement. If investors believe that an opportunity necessitates a particular role for government, for a particular period of time, any significant change in direction is likely to create uncertainty and to deter investors.

SAMPLE POLICIES:

New Markets Tax Credit, US

The policy enjoys broad political support and has been relatively well funded throughout its life. Nevertheless, a tax that has a longer-term funding cycle, and therefore more permanence, might attract additional sources of capital currently deterred by political uncertainty.

At the same time, the more viable an impact investing market becomes, the more carefully a government should consider its ongoing involvement. Government commitment to an impact investing market when it is unnecessary can stifle innovation and lead to the inefficient deployment of capital.

Multi-fondos, Peru

Multi-fondos succeeded in directing pension fund capital to the domestic private equity industry, a prospective benefit to local SME development. However, the replacement of an especially supportive financial sector regulator resulted in a more conservative approach to the policy and a reduction in mandated allocations to private markets that some impact investors might have come to depend on.

Implementation

Policy implementation—the final, critical step—is fraught with difficulty. Competent bureaucracies must provide clear directions, enforcement, robust monitoring, and efficient execution, giving confidence and flexibility to investors. Getting things to work, in practice, is what ultimately determines a policy's effectiveness.

An institutional context and infrastructure that supports modification is crucial. When the specific provisions of a policy hamper its delivery, it is essential that government respond quickly to a demonstrated need for adjustment. It is sometimes the case that policies, by design, include opportunities to revisit and recalibrate key provisions, which can also be helpful.

The environment in which impact investing policy operates is inherently complex. By definition, government is attempting to achieve a social objective using private actors over which it has limited control. Good implementation results from a myriad of calibrated decisions balancing rigorous monitoring with the need to be flexible and efficient, and ensuring that the costs of engaging the market do not outweigh the benefits.

SAMPLE POLICIES:

Feed-in Tariffs, Germany

The success of Germany's feed-in tariffs is highly contingent on both the competency of the agency that sets prices for renewable energy and the willingness and capacity of government to adjust prices to reflect market realities. Similarly, in Japan, the success of real estate cap and trade depends on the government's ability to collect and evaluate benchmark data.

Clean Development Mechanism, Brazil

Rigorous project approval processes have created significant risks for investors, but have arguably resulted in higher quality projects from an emissions reduction perspective.

VIII. Conclusion

Where private capital seeks financial return in markets with intentional and substantial social or environmental benefit, government may have an opportunity to realize a policy objective by supporting impact investing.

Private market activity has the potential to leverage capital on a significant scale, respond quickly to need, provide discipline to investee projects and organizations, and create markets that survive beyond the life of a political cycle.

However, it is important to carefully weigh the advantages that private markets bring against the public sector's inherent ability to pool risk and spread costs and benefits. And to the extent that policies subsidize or mandate ineffective delivery of social goods, or undermine the benefits of the markets they are meant to catalyze, they should be modified or rejected.

This report provides a framework for thinking through the appropriate role for government, the point in the market at which intervention is warranted, and the criteria that will likely play a part in determining effectiveness.

We intend the research not to be determinative, but to initiate a discussion. In situations where impact investing is a desirable delivery mechanism, the framework offers policymakers, investors, and civil society a place to begin their analysis.

IX. Appendices

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 - B. Additional Policies
 - C. Attendees: Policymaking for Impact Investing Innovation
-

A. Case Studies

There are thousands of policies that influence impact investors in some manner globally. Although almost all of these policies date from a time when the activity of impact investing was nascent, and the terminology related to the practice was certainly undeveloped, they have nonetheless influenced markets that generate intentional social or environmental benefit.

We selected 16 case studies that were broadly representative of geographic diversity, issue diversity, diversity of policy method, and diversity of intention. Around half of the policies more directly intervene in what we describe as impact investing markets, and half provide an ancillary benefit to investors as one component of a wider objective. We did not select these case studies because we know them to be the most efficient and effective. On the contrary, our purpose was to select a group of policies that demonstrate the often inadvertent ways in which governments have so far leveraged private capital for social good. Yet taken together, these policies provide insight into the future development of policies intended specifically to catalyze private capital.

The policies are primarily national in scope. With limited resources, the work of national and subnational governments presented a rich diversity of market environments for informing an analysis with broader applications.

A case study provides a narrow window into policies that affect impact investing. Policies have different objectives, operate in different national and market contexts, and in many instances affect impact investing peripherally. Yet each case study provides insight into the critical nuances of government intervention and tells a story of a concrete policy in its own right, providing a window into the many instruments available to policymakers and the complexity of related issues—socioeconomic, political, bureaucratic, and structural—that influence outcomes.

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CASE STUDY 1:

New Markets Tax Credit



GEOGRAPHY	United States
POLICY TYPE	Tax Credit
POLICY MEANS	Directing Capital

DESCRIPTION

Provides tax relief to investors in exchange for qualified investments in low-income community businesses and development projects

LESSONS FOR THE FIELD

- **Targeting:** Tax incentives ultimately divide a subsidy between investors and “beneficiaries”; if community impact is the objective, tax incentives must be weighed carefully against direct investment.
- **Implementation:** Details of implementation can have a significant effect on outcomes for underserved communities. In the case of the NMTC, implementation has strongly favored complex transactions and entities that fund commercial real estate projects.

IN BRIEF

The New Markets Tax Credit (NMTC) allows investors to reduce their tax burden in exchange for investment in a qualified community development entity (CDE), which reinvests the funds in business and real-estate development in low-income communities. It is administered by the CDFI Fund in the US Department of the Treasury.

The program has substantially altered the impact investing landscape in the US by lowering the price of investment in low-income communities characterized by poverty rates in excess of 20 percent, or median income below 80 percent of the statewide median. Investors can claim tax credits totaling 39 percent of the original equity investment for a period of seven years.¹ Through 2009, more than \$16 billion has been invested in low-income communities through the NMTC program, although it is unclear how much of this infusion of capital would have occurred in the program’s absence.

Policy Context and Development

Congress passed the NMTC in 2000, at a time when the nation was at the peak of a long economic boom, yet persistent geographic concentrations of poverty continued to prevent some people from sharing in the broad economic expansion. The tax credits emerged as an effort to increase the flow of capital to communities that had been left behind and could not finance economic development on traditional terms. Many of the drafters of the legislation, as well as President Clinton himself, intended for the program to maximize investment and impact in low-income communities as a form of poverty alleviation.²

The legislation represented a compromise on how to attract investment in impoverished communities. The White House plan focused on government-led investment, proposing the creation of a new type of private entity to administer equity investments and government-guaranteed loans to qualifying businesses. The opposition party Republicans emphasized tax benefits for investment in “renewal communities” accompanied by provisions requiring local communities to create business-friendly environments.³

Drafters delegated to the CDFI Fund the task of interpretation and crafting regulation to implement the program. The Bush Administration’s decision to cut funding to the CDFI Fund, which implements the NMTC program, had a significant effect and led to the Fund’s conscious choice to distance itself politically from the CDE selection and allocation process, lest it risk further criticism from an unsympathetic Congress. Rather than evaluate applicants via an internal review and site visit process, the Fund relies on a decentralized network of expert advisors and a standardized scoring system created specifically for the program, arguably at the expense of flexibility and innovation.⁴

Implementation

CDEs serve as intermediaries between investors and low-income communities by allocating tax credits to investors in return for a qualified equity investment. Equity investments in CDEs are converted into financing for qualified low-income community investments, which often take the form of subsidized debt.

The CDFI Fund grants allocation authority to CDEs through a competitive annual process whereby CDEs apply for credits on the basis of business strategy, capitalization strategy, management capacity, and community impact. In order to qualify as a CDE, an entity must have a primary mission of serving low-income communities and be accountable to its target population through community board participation. Although both for-profit and nonprofit entities can be CDEs, only for-profit entities may issue tax credits in exchange for qualified equity investments.⁵ Proposals receive points for each section from three independent reviewers who make recommendations to the CDFI Fund about which proposals should receive allocations and in what amount.

POLICY IN ACTION:

LISC/National Equity Fund, Inc.

In 2009, the CDFI Fund granted \$115 million in NMTC allocation authority to National Equity Fund, the CDE affiliated with the nonprofit Local Initiatives Support Corporation (LISC). LISC/NEF is one of the largest syndicators of New Markets and Low Income Housing Tax Credits in the nation.

Investors like US Bank, Wells Fargo, HSBC Bank, and others have made qualified equity investments and loans to NEF in exchange for tax credits. NEF, in turn, invests in qualified businesses and development projects that create jobs, housing, and commercial space in low-income communities.

Impact

Through fiscal year 2009, CDEs reported making more than \$16 billion in NMTC investments in low-income communities. Approximately 95 percent of funds were invested in designated areas of distress, and 90 percent in metropolitan areas. The Department of the Treasury has reported that for every dollar of foregone tax revenue, NMTC leverages \$12-\$14 of private investment.⁶

The CDFI Fund is not required by law to measure program impact, although it does collect extensive data on project outputs—a reporting burden that, investors say, creates a significant disincentive to structuring deals through NMTC. The inherent complexity of quantifying community impact combined with the absence of a single standard for impact evaluation makes it difficult to gauge the true effect of the program on low-income businesses and communities. For example, the CDFI Fund collects no detailed project-level data that would identify the portion of the subsidy channeled to businesses and the overall community impact. It also collects no information about incomplete or failed projects.

Although there can be little doubt that the program has directed capital to distressed communities, questions remain as to whether it has had the intended effect in those areas. The overwhelming majority (68 percent) of NMTC investment has been in real-estate CEDs, 98 percent of which is made up of commercial and mixed-use development. Real estate deals are attractive to investors because they are long-term investments that are less likely to fall out of compliance within the seven-year assessment period, or to require reinvestment of returns within seven years. Ultimately, real-estate investments also have a higher risk-adjusted return than other alternatives, particularly small business debt or equity.⁷ To many, this result signals the limitations of the NMTC program in providing capital to small and low-income businesses in struggling communities.

Because tax credit allocations are made to CDEs and not to individual projects, there is no single standard for determining which projects are the most appropriate; rather, individual CDEs are responsible for project selection.⁸ The CDFI Fund prioritizes those that can demonstrate substantial community impact, and many CDEs have internal procedures that attempt to ensure that businesses receiving NMTC financing would not otherwise be able to close their funding gap, a criterion known generally as the “but for” test. It is unclear, however, whether these procedures are effective in targeting funding to businesses that are underserved by traditional credit markets, and difficult to determine whether deals would have been feasible without NMTC financing.⁹ Some critics point out that the requirement for a strong capitalization strategy favors profit-driven CDEs who use NMTC to lower the price tag on already profitable projects with limited community impact.¹⁰

Future Directions

The “real estate tilt,” critics argue, means that the credits do not necessarily provide needed types of capital, nor help low-income and minority entrepreneurs, nor create quality jobs. At the same time, they divert capital away from small businesses and other types of projects with a greater need for subsidized capital and potentially greater community impact.

Although real-estate deals will continue to be attractive to investors seeking financial return, several potential solutions may alter the incentive structure of NMTCs in ways that increase their impact on low-income communities. Some analysts have recommended changes that effectively eliminate the profit incentive for CDEs by requiring that they be mission driven, arguing that this would not substantially reduce impact investment opportunities, but would instead direct investment capital to existing mission-driven CDEs.

Investors have suggested that the complexity of NMTC transactions is a potential barrier to smaller deals that may be more appropriate for small businesses, resulting in less equity being left in low-income communities. A number of proposals may simplify this, including streamlining the leveraged debt investment model and shortening the time frame for investment.

Another opportunity for improving the program involves improving data collection to target impact more efficiently. The CDFI Fund currently requires CDEs to report on employment and facilities outcomes; however, it is difficult to establish causal links between these outcomes and the existence of the NMTC program. Better outcomes-focused data at the project level—on the sale price of tax credits, for instance—would permit a more accurate determination of the program’s impact on low-income businesses, whereas data on failed projects could improve the credit allocation process and strengthen performance measurement.

At present, program requirements in certain areas shape deal structure in important ways and may cause market inefficiencies in the deployment of capital. There may be ways for policymakers to reconcile the tension between directing private capital to areas with greatest need and lowering the cost and complexity of deals for investors. The reauthorized New Markets Program, introduced in 2009, encourages a broader investor base through expanded tax credit eligibility; the Obama administration is also considering additional steps to speed the investment of funds to increase NMTC financing to small businesses that require short-term capital.

Finally, there may be an opportunity to improve investor uptake by demonstrating long-term political commitment to the NMTC program. The lack of permanency, evinced by the continuing need for reauthorization, is a major limiting factor to attracting additional participants, and may restrict further investment in people and infrastructure on the investment side.

¹ The credits are designed to be used cumulatively over seven years: 5 percent for the first three years and 6 percent for the remaining four. Any returns realized on the original investment within the seven-year period must be reinvested in qualified low-income community investments.

² Julia Sass Rubin and Gregory Stankiewicz. “Evaluating the Impact of Federal Community Economic Development Policies on Targeted Populations: The Case of the New Markets Initiative of 2000,” *Community Development Investment Review* 1, no. 1 (2003).

³ John Godfrey, “Package to Aid Poor Areas Stirs High Hopes; Senators Tout Clinton-Hastert Deal,” *The Washington Times*, May 24, 2000.

⁴ Rubin and Stankiewicz.

⁵ Government Accountability Office (GAO), “New Markets Tax Credit: The Credit Helps Fund a Variety of Projects in Low-Income Communities, but Could Be Simplified” (GAO-10-334, 2010).

⁶ US Department of the Treasury. NMTC Fact Sheet. February 2010.

⁷ Lauren Lambie-Hanson, “Addressing the Prevalence of Real Estate Investment in the New Markets Tax Credit Program” (working paper 2008-04, Federal Reserve Bank of San Francisco, Fall 2008).

⁸ The Urban Institute, *Analysis of Selected New Markets Tax Credit Projects* (Washington, DC: CDFI Fund, June 2007).

⁹ GAO, 2010.

¹⁰ Rubin and Stankiewicz.

CASE STUDY 2:

CDFI Fund Program



GEOGRAPHY	United States
POLICY TYPE	Public Investment
POLICY MEANS	Supply Development

DESCRIPTION

Supports community development financial institutions through direct financial and technical assistance

LESSONS FOR THE FIELD

- **Targeting:** Flexible equity capital from the CDFI Fund has been critical to developing an innovative, nimble CDFI sector. However, the Fund must manage the perennial tension between organizational diversity and efficiency among CDFIs. Moreover, broad support for institutions may come at the expense of precise impact.
- **Coordination:** The CDFI Fund has succeeded primarily because it supports institutions that also benefit from other significant incentives, including the New Markets Tax Credit and the Low-Income Housing Tax Credit, and from concessionary sources of capital from investors including banks motivated by the Community Reinvestment Act.

IN BRIEF

The Community Development Financial Institutions (CDFI) Fund within the Department of the Treasury was authorized by Congress in 1994 with the explicit mission of expanding the capacity of financial institutions to provide credit, capital, and financial services to underserved populations and communities in the United States.

The Fund achieves its mission by certifying, providing financial support for, and building operational capacity of CDFIs, which are specialized financial institutions with a primary community development mission. It is the only government program to invest directly in CDFIs, and, although its programming has evolved and changed over its 15-year history, it works primarily through three central programs:

- The CDFI Program provides financial and technical assistance to CDFIs,
- the Bank Enterprise Award provides financial awards for banks that invest in low-income communities, and
- the New Markets Tax Credit offers tax incentives for investors to make qualified investments in low-income communities.

Policy Context and Development

Congress authorized the CDFI Fund in 1994, realizing one of President Clinton's key campaign promises: a network of community development banks modeled after Chicago's South Shore Bank. It followed a recommendation to create a government body to build capacity and support the work of the burgeoning CDFI field, and to increase the number of institutions working in low-income communities across the country.

ShoreBank and other CDFIs like it had emerged to meet the growing need for intermediaries to channel community development capital from mainstream financial institutions motivated largely by the Community Reinvestment Act (CRA). Policymakers and advocates saw the need for a federal program that would strengthen this intermediation function, support the fulfillment of banks' obligations under the CRA, and leverage private market capital to achieve an important policy goal: reinvestment in underserved communities.

The CDFI Fund and the industry it supports are situated in the context of an extensive system of policies, rights, and institutions designed to support investment in historically underserved rural and urban areas. Without other policy interventions in the community development space—most notably the CRA, but also the Fair Housing Act and others—the CDFI industry would be a less powerful magnet for private market capital.

Clinton championed authorizing legislation for the proposed CDFI Fund, and both houses of Congress passed it overwhelmingly. Yet the program has received varying levels of support from subsequent legislatures.¹ Some of the resulting allocation decisions have shaped CDFI Fund programs in lasting ways, particularly with respect to key processes for application evaluation, performance measurement, and program implementation.

The Fund has enjoyed strong political support from the Obama administration, including special stimulus funding of \$100 million and an additional \$3 billion of New Markets Tax Credit allocation authority. The president's 2010 budget requested, and Congress appropriated, \$246 million to the CDFI Fund, a 127 percent increase over 2009.

Implementation

The Fund's CDFI Program is its largest and longest-running direct expenditure initiative.² It provides financial and technical assistance awards to CDFIs through a competitive application process. Financial assistance (FA) includes grants, loans, and equity investments to CDFIs that have comprehensive business plans for creating community development impact and that demonstrate the ability to leverage private sector sources of capital. Technical assistance (TA) awards help CDFIs and entities proposing to become CDFIs build their capacity to advance community development and to meet capital access needs in their target markets.

The FA process, by far the most subscribed, is an important driver of industry growth. By providing working capital on an institutional rather than a project basis, FA awards strengthen the financial position of CDFIs and enable them to attract greater private investment than they otherwise might.

The FA application selection process has had unintended consequences on the composition and development of the CDFI industry. For instance, the selection criteria favor larger CDFIs and loan funds in

POLICY IN ACTION:

Pacific Community Ventures

PCV is a community development venture capital fund manager in San Francisco, CA. An early investment of \$1 million from the CDFI Fund helped PCV to launch its second equity fund to invest in California businesses that provide good jobs to low- and moderate-income workers.

CDFI certification and assistance have played a key role in attracting additional investors, in particular, Community Reinvestment Act-related capital from financial institutions. Subsequent CDFI Fund awards have enabled PCV to expand its business advising services and build internal capacity to support its programs at scale.

particular, at the expense of smaller, emerging institutions and those with innovative programming.³ This systematic preference for larger, established CDFIs both reflects and magnifies these institutions' ability to access private capital to finance their activities. At the same time, however, the Fund's portfolio may include many organizations that could achieve impact without public assistance, and some observers note that its selection process favors proven strategies over innovative ones.

In 2010, the Fund opened the inaugural round of funding for the Capital Magnet Fund (CMF), which seeks to increase capital investment for the development, rehabilitation, or purchase of affordable housing and related economic development activities. CDFIs can use CMF funding to leverage private market capital through loan loss reserves, risk-sharing loans, or guarantees, or to capitalize housing development loan and investment funds. The \$80 million pilot program represents the CDFI Fund's second-largest program in terms of direct expenditure.

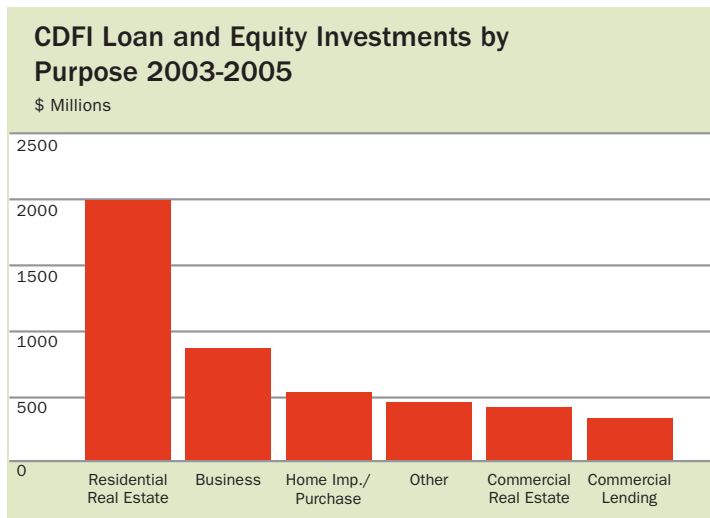
In its first round of funding, critics charged the Fund with insufficient documentation of proposal evaluation and award decisions, a concern that led to greater oversight of the application evaluation process and established clear expectations for transparency. Since then, efforts have focused on improving data collection and reporting on the impact of the Fund's programs. The Community Investment Impact System, adopted in 2002, collects data at the institution and transaction level for all Fund awardees, although transaction-level data is largely voluntary and not widely reported.⁴

Impact

Assessing the impact of community investments made with the support of the CDFI Fund presents a

significant challenge to the community development field. The Fund itself has made major strides in collecting institutional and transaction-level data from CDFIs that receive federal assistance through its programs; however, this self-reported information reflects only annual outputs of investments—for example, the number of jobs created or housing units built—rather than longer term outcomes like increasing homeownership or employment tenure.

Nevertheless, the success of the Fund in building the capacity of CDFIs to serve low-income communities is clear, and there is evidence that CDFIs receiving assistance through the Fund have had a significant, if not precisely quantifiable, impact on their



Source: US Government Accountability Office

communities. In the three years between 2003 and 2005,⁵ funding recipients:

- financed loans to 8,000 businesses, creating or maintaining more than 185,000 jobs;
- facilitated construction or renovation of more than 91,000 units of affordable housing;
- helped 12,400 first-time homeowners purchase homes; and
- provided training and assistance to 434,00 borrowers or prospective borrowers.

Other CDFI Fund programs have had less success, including the Bank Enterprise Award, which the Government Accountability Office determined to have had an insignificant impact.⁶

Perhaps the CDFI Fund's greatest strength is its model of government support of intermediaries to leverage private capital. To date, the fund has invested more than \$1.3 billion and catalyzed tens of billions in private investment by enabling CDFI intermediaries to use public funds as equity, and by providing the necessary liquidity to close financing gaps for higher risk projects. One of the Fund's major strengths—its strategy of supporting institutions rather than specific projects—promotes innovation and industry flexibility in responding to market demand.⁷

Future Directions

There is widespread consensus that the CDFI Fund performs a unique and important function. By providing flexible capital to CDFIs in the form of financial assistance, the program supports institutional capacity rather than the execution of specific projects; this is a particularly critical role in the nonprofit sphere, where organizations struggle to build general operating capacity and healthy reserves.

In light of the Fund's broad-based support role, the new and expanded programs launched in the 2010-11 funding cycle present both an opportunity and a risk. On one hand, the decision to house new programs that target very specific outcomes, such as Bank on USA and the Healthy Food Financing Initiative, within the CDFI Fund presents an opportunity to leverage the Fund's history and culture of innovation in implementation. At the same time, these initiatives represent a departure from the Fund's traditional role as a supporter of institutions, insofar as they resemble mainstream public grant programs for specific programmatic interventions. In this sense, they are a threat to the Fund's core strength of providing general operating support and equity-like funding to CDFIs.

As the Fund's reauthorization approaches, a number of questions have arisen about whether it should continue to promote institutional diversity among CDFIs in terms of size and scope of services. Historically, the Fund has certified CDFIs on the basis of whether they meet a need in their community, rather than whether another organization might do it better. This commitment has preserved a natural tension between funding a few larger—and by all accounts, more efficient—CDFIs, and those that are smaller but provide an important service within a geographic or market niche. The Fund has a number of tools at its disposal to shift the balance in favor of larger institutions, including increasing the maximum size of financial assistance awards and tying assistance awards to efficiency criteria such as overhead ratios or output volume. Whether or not it chooses to use them may signal a shift in strategic focus.

Some observers believe that there is a larger role for the Fund to play in promoting research and learning in the CDFI field through collection and disclosure of performance data.⁸ High-quality data about CDFI performance would strengthen feedback and learning, help researchers identify promising practices, and potentially increase market investment in the CDFI industry.

¹ Mark Pinsky, "Coalition of Lenders and Investors Help Create the Community Development Financial Institution Act of 1994" Shelterforce 79 (January/February 2005), www.nhi.org/online/issues/79/coallaw.html

² Although the direct expense budget for the New Markets Tax Credit program is far smaller and is primarily administrative costs, it represents a far larger source of capital for investors and foregone tax revenue to the government.

³ Abt Associates, "Assessment of the CDFI Fund Program, Training Program and CDFI Certification" (Cambridge, MA: 2007).

⁴ Interview, Donna Fabiani, Opportunity Finance Network.

⁵ CDFI Fund, Three-Year Trend Analysis of Community Investment Impact System Institutional Level Report Data, 2003-2005 (Washington, DC: US Department of Treasury, December 2007).

⁶ Government Accountability Office, Treasury's Bank Enterprise Award Program: Impact on Investments in Distressed Communities Is Difficult to Determine, but Likely Insignificant (Washington, DC: GAO report 06-824, July 2006).

⁷ Opportunity Finance Network, Final comment letter on CDFI Authorizing Statute, May 7, 2010, www.opportunityfinance.net/public/files/CDFI%20Fund%20Authorizing%20statute%20comments%20May%2010%20final.pdf

⁸ Mark Pinsky, Draft comments to the CDFI Fund on authorizing statute, Opportunity Finance Network, May 7, 2010.

CASE STUDY 3:

Energy Star Program



GEOGRAPHY	United States
POLICY TYPE	Disclosure
POLICY MEANS	Directing Capital

DESCRIPTION

Certification program identifying energy-efficient products and facilities

LESSONS FOR THE FIELD

- **Targeting:** Overcoming information problems related to rapidly changing technology requires frequent updating of benchmarks and standards.
- **Implementation:** Third-party certification is important to preserving the integrity and credibility of evaluation programs.
- **Transparency:** Broad awareness of the voluntary Energy Star label has been successful in shaping consumer behavior, particularly in residential and commercial property management. However, few investors use the label as an investment screen, suggesting Energy Star's analytical process and data output may be insufficient to meet their needs.

IN BRIEF

The US Environmental Protection Agency (EPA) launched the Energy Star program in 1992 as a voluntary labeling program designed to enable consumers to make more informed decisions about energy efficient products. Jointly administered by the EPA and Department of Energy (DOE), the program allows manufacturing partners whose products meet specified energy efficiency standards to use the program's "Energy Star" label to market products.

Because Energy Star labeling covers the consumer goods market so comprehensively, and has expanded into other categories of assets like homes and commercial buildings, it has the potential to act as a market signal to investors by reducing information barriers to investment in energy efficiency at scale. However, there is relatively little evidence to indicate broad use of the Energy Star label itself as a "screen" for selecting environmentally responsible investments, or as an opportunity for increasing the impact profile of property investments in particular.

Policy Context and Development

The rationale for offering better information about energy-efficient products was to overcome the risk and information costs of investment facing consumers. Without information about longer run cost savings and performance, DOE and EPA feared that consumers would have no incentive to choose energy-efficient products, and demand for new energy-efficient technologies would never materialize. The Energy Star brand was piloted in 1991, prior to launch, on home computers and monitors, an ideal opportunity to influence an emerging consumer market that would likely grow significantly over time.

Besides lowering the cost to consumers of investment in energy-efficient appliances, EPA and DOE sought to provide manufacturers with incentives to develop products that used less energy. By improving product information, they could accomplish both.

In its 18 years of existence, the program has evolved to include not only product certification but also building ratings and management tools. New programs include resources for homeowners and builders, as well as tools and standards for industry to improve energy performance of facilities. The program has also spun off state-level rebate programs that offer tax incentives to consumers for purchasing Energy Star-labeled products and homes, and for upgrading or retrofitting existing homes.

Implementation

The EPA and DOE jointly administer the Energy Star program. Each product category has independent efficiency metrics, which are generally based on standard measures of energy and resource consumption. In determining what product categories to certify, EPA and DOE consider market availability and growth potential, the potential for significant energy and cost savings on a national level, availability and ownership of technology, and the impact and visibility of labeling. The agency conducts an energy and environmental analysis to set baseline standards for efficiency, and manufacturers submit an application to certify individual products.

In general, Energy Star agencies aim to revise product standards when more than 50 percent of products available on the market meet the standard, or when regulatory standards are tightened or technologies and testing protocols change. In 2010, an audit by the Government Accountability Office revealed that the Energy Star program was effectively a manufacturer “self-certification program” and vulnerable to fraud and abuse. The process enabled manufacturers to submit product descriptions and energy consumption data, and certified products on the basis of whether or not the manufacturer’s reported specifications met the standards set by the program, not whether they actually met the standards. The program added spot verification audits in 2002 to discourage falsification of data, but testing fell far short of the rigor required to preserve the brand’s integrity: by 2006, of 44,000 registered products, the EPA had tested only 160 in nine product categories.¹

POLICY IN ACTION: TIAA-CREF and Energy Star

Energy Star helps businesses and property owners implement energy management strategies for buildings. By partnering with major institutional investors like TIAA-CREF to improve the energy performance of their entire real estate portfolio, Energy Star can significantly reduce resource consumption while helping companies improve their bottom line.

TIAA-CREF worked with Energy Star to reduce energy consumption 10 percent across 43 million square feet of office space and multi-tenant housing. Nicholas Stolatis, Strategic Initiatives director at TIAA-CREF, acknowledges that energy improvements create value for their tenants and clients and “improve the economics of our real estate investment portfolio.”

Following the GAO audit, EPA and DOE have developed a new system that requires independent testing and verification, at the manufacturer's expense, of all products submitted for certification. This new system also requires more frequent updates to standards, every two to three years instead of every 10 under the old system. The system is designed to prevent fraud and abuse, and to ensure that certified products are in fact leaders in energy efficiency in a market characterized by rapid technological change. The ultimate effect of these changes on consumer behavior and manufacturer uptake is unclear.

Energy Star also makes its label available to companies whose buildings and facilities are more energy efficient than others in their industry, and to homeowners seeking to reduce energy usage and qualify for tax rebates. Through its residential and commercial buildings programs, Energy Star offers owners and managers of buildings access to resources and tools to help measure and improve energy efficiency, including detailed industry-level standards for plant efficiency. The commercial program certifies facilities that meet or exceed Energy Star standards for their industry, and recognizes as Energy Leaders companies that have made a significant commitment to improving energy efficiency.

Impact

An empirical analysis of five eco-labeling programs in the US concluded that government programs, specifically Energy Star, are more successful than private ones on the basis of both consumer and manufacturer response.² In terms of consumer awareness, the Energy Star label has achieved wide brand recognition; an estimated 70 percent of the American public recognizes the Energy Star label and associates it strongly with cost savings and environmental protection.³

It is easy to quantify the program's outputs, but much more difficult to measure its environmental impact and corresponding energy savings. To date, Energy Star has certified nearly 40,000 individual product models, and approximately 1.6 billion square feet of building and plant space have earned the Energy Star label, which, according to the EPA, equates with using approximately 35 percent less energy on average than similar facilities. Energy Star reports that sales of certified products prevented 45 million metric tons of greenhouse gas emissions in 2009 alone, corresponding to a saving of nearly \$17 billion on energy costs.

Although there is little doubt that the Energy Star program has improved energy savings, increased consumer awareness of energy efficiency, and provided some impetus for manufacturers and property owners to improve energy efficiency, the program's standards and processes have come under fire for being insufficiently rigorous. For example, a joint audit by EPA and DOE found that although most Energy Star-labeled products did, in fact, meet the program's standards, so also did the majority of noncertified products on the market. The audit concluded that the energy savings calculated according to its standards may be neither accurate nor verifiable.⁴ These results suggest that the methods used to calculate energy savings may be overestimating the benefit of Energy Star-rated products and need to be updated more frequently to keep pace with rapidly changing technology.

Energy Star certification has also become part of the LEED protocol for existing buildings, a standard of performance that has attained broader currency among investors. However, there is relatively little evidence to indicate broad use of the Energy Star label itself as a "screen" for selecting environmentally responsible investments, or as an opportunity for increasing the impact profile of property investments in particular. This may be because investors' needs for information differ significantly from the needs of consumers, and because up-front costs of achieving energy efficiency in real estate assets remain high.

Despite these barriers to scale, the effect of the Energy Star program on the market for energy-efficient products and facilities is indisputable, particularly in residential and commercial real estate. More than 12,000 organizations, including over 8,500 builders, in the public and private sectors have invested in reducing energy use in their facilities. This growing interest in energy efficiency has clear implications for investors seeking out firms who have made top-level commitments to improve energy performance, and to real estate investors like TIAA-CREF (see inset) whose participation in the program has resulted in bottom-line improvements over its entire real-estate portfolio.⁵

Future Directions

EPA and DOE have taken swift action to address the weaknesses in certification and standard-setting by requiring independent, third-party testing of Energy Star products and by setting guidelines that standards should be updated more frequently and be more exclusive, signifying only the market leaders in energy efficiency.⁶

Other challenges for Energy Star include benchmarking and measuring performance in the face of rapid technology change. As the market for energy-efficient products continues to develop, it will be necessary for the program to continue to adjust its performance benchmarks, and to ensure that its standards reflect an acceptable level of efficiency over and above industry averages. Finally, although it appears that some investors have realized better returns as a result of efforts to reduce energy consumption, there remains a broader question about whether voluntary product labeling and energy improvements are an effective way to achieve reductions in energy consumption at the appropriate scale, particularly in the real-estate sector where up-front costs are high.

¹ “Audit Report: Department’s Management of the Energy Star Program DOE/IG-0827.” US Department of Energy, Office of Inspector General, Office of Audit Services. (Washington, DC: October 2009.)

² Banerjee, Abhijit and Barry D. Solomon. “Eco-labeling for energy efficiency and sustainability: a meta-evaluation of US programs. *Energy Policy* 31. (2003).

³ US Environmental Protection Agency, “Energy Star—Power to Protect the Environment Through Energy Efficiency” (Washington, DC: US 2003).

⁴ Dept of Energy DOE/IG-0827, 2009.

⁵ Innovest Strategic Value Advisors, “Energy Management and Investor Returns: The Real Estate Sector” (New York: October 2002).

⁶ Sonja Ryst, “Trying to Get the Glow Back; Government Overhauls Appliance Testing to Restore Faith in Energy Star Label,” *The Washington Post*, July 10, 2010.

CASE STUDY 4:

Multi-fondos



GEOGRAPHY	Peru
POLICY TYPE	Regulation
POLICY MEANS	Supply Development

DESCRIPTION

Provides greater flexibility for domestic pension funds to invest in SMEs through private markets

LESSONS FOR THE FIELD

- **Targeting:** Broader policies can significantly affect markets, but not necessarily where the perceived social need is greatest. For example, pension funds are likely to gravitate to larger deals, creating a need for policy overlays to target smaller funds and SMEs.
- **Coordination:** The effectiveness of supply-side interventions is contingent on enabling infrastructure and the availability of investable opportunities, which may require complementary policy.
- **Commitment:** Changed institutional conditions can always lead to a reversal of policy, creating uncertainty for investors. Policies with narrow political or bureaucratic support are more likely to be susceptible to amendment or elimination.

IN BRIEF

Multi-fondos, or “multiple funds,” are investment options within Peruvian pension funds, created in 2005 for the purpose of providing individuals in the country’s mandatory retirement savings system with a choice of portfolio risk and return profiles. Peru’s multi-fondo system, modeled on similar reforms in Chile, introduced three portfolio diversification options and, as an ancillary benefit and the focus of this policy case, opened the door to larger volumes of institutional investment in private equity, potentially providing a much-needed supply of capital to the smaller businesses that generate around 70 percent of gross domestic product and employment in Peru.¹ Although Peru’s Banking Superintendency has recently become more wary of pension fund deployments to private equity, imposing a 3 percent cap for pension fund allocations to all alternative assets in early 2010, the allocation of pension assets to private equity has grown to 4 percent of a total \$25 billion in assets since 2004,² when pension funds were first permitted to invest in the asset class.³

Capital access for smaller companies is an important impact investing market in most countries, where broad agreement exists on the essential developmental role of the private sector. Micro, small, and medium enterprises constitute more than 90 percent of businesses globally and account for 50-60 percent of employment.⁴

Policy Context and Development

Peru has been experiencing a period of rapid economic growth and was expanding for the longest period on record before a 1 percent downturn in 2009. However, the economy remains undiversified, particularly in its capital markets, where commodity-producing firms account for two-thirds of publicly listed companies. Initial public offerings are still rare, and the domestic fixed-income market is underdeveloped, illiquid, and composed almost entirely of public debt bought and held by the country's five fund management firms, known as Administradores de Fondos Pensiones (AFPs).⁵

Commercial banks dominate the Peruvian financial system, the three largest of which account for about half the total assets. These banks are conservative, with strict lending requirements for risk and securitization, and few have established credit lines dedicated to SMEs. In addition to commercial banks, there is a wide network of rural banks, credit cooperatives, and microfinance schemes. However, most of these facilities focus on small crafts, farming, and retail, and the private equity industry is largely undeveloped.⁶ Although the financial industry is a significant impediment to a more vibrant SME sector, demand-side factors including widespread informal practices and unreliable financial statements also create problems for Peruvian SMEs.⁷

Peru established its private pension system (PPS) in 1992, at a time of financial crisis and in the face of the virtual collapse of the state-run pension system.⁸ Individuals had to choose between staying in the public system or investing in the new private system, which the AFPs administer. By December 2004, the PPS had grown to more than twice the size of the public system, at \$7.2 billion,⁹ and the number of PPS participants had increased from 920,000 in 1993 to 3.4 million.¹⁰ The creation of multi-fondos, first in Chile in 2002 and since extended to eight countries including Peru, was motivated largely by the Asian financial crisis, which alerted governments to the risk of holding savings in a single fund.¹¹

Although multi-fondos are just one supply-side component of the policy infrastructure necessary to support private equity investing and SME equity finance in Peru, the reform had immediate effects. When Peruvian pension funds were permitted to invest in private equity in 2004, the first recipient of funds was the Fondo Transandino Peru (FTP), a private equity vehicle managed by Access SEAF with a SME focus (see inset).

Outside of the pension fund sector, credit guarantee schemes for SMEs have existed in Peru since the early 1980s, established by the government with the support of the donor community. However, they have provided little relief because they target personal loans and amounts below \$5,000 on average.¹² Corporación Financera de Desarrollo (COFIDE) is an independent Peruvian financial institution that manages a Ministry of Economy and Finance credit line for SMEs at competitive interest rates of 12-16 percent per year. In 2006, the program lent \$25-30 million, with most of the funds going to agribusiness and other traditional sectors.¹³

POLICY IN ACTION:

Access SEAF

Three private equity vehicles managed by Access SEAF—the \$15 million Fondo Transandino Peru and the \$45.5 million Latam Funds, including the Latam Growth Fund (Peru and Colombia), and Latam Peru (Peru only—have made investments in Peru's agro-industry, logistics, tourism, sustainable forestry and environmental services, health, financial services and clean energy infrastructure.

Access SEAF is currently evaluating potential investments in the retail and health services sectors. Both funds' investors include three Peruvian pension fund managers.

Implementation

Peru's multi-fondo system requires that each AFP offer participants three investment options: fund 1, a "preservation" fund, which can invest up to 10 percent of its assets in equities; fund 2, a "mixed" fund, which can invest 45 percent in equities; and fund 3, a "growth" fund, which can invest 80 percent in equities.

The relationship between the multi-fondo system and the allowable investments by pension funds in private markets is determined by the administrative fiat of the Superintendent of Banking and Insurance (SBS). Until recently, pension fund investments in venture capital counted toward the limit of investment in equity. In early 2010, the SBS reversed course, imposing a more restrictive 3 percent cap on pension fund allocations to all alternative assets, with the expectation that the limit would increase over time.¹⁴

The SBS introduced a separate provision in December 2008 allowing pension funds to diversify their private equity portfolios to global firms, citing the benefits of technology transfer and international competition. Previous rules had required non-Peruvian firms to have a minimum of \$10 billion under management globally, effectively barring midmarket growth capital firms from raising capital in Peru.¹⁵

Impact

Investments in private equity by Peruvian pension funds have increased significantly since they were first permitted in 2004. A senior Peruvian regulator recently estimated that pension funds had invested around 4 percent of a total \$25 billion in private equity and that this allocation would grow considerably.¹⁶ However, it is not certain how much of this increase is due to the creation of the multi-fondos.

It is also not clear that the multi-fondos have assisted in the development of Peru's private equity sector, which remains small and is believed to be a significant barrier to SME access to equity, catalyzing few links among university and research centers, entrepreneurs, and venture capital.¹⁷ Just five private equity funds purporting to invest in SMEs operate in Peru: FTP; the two LATAM Funds that Access SEAF manages; Aureos Capital, which has a \$200 million fund investing in Mexico, Central America, Peru, and Colombia; and Summa, a mezzanine fund targeted to medium-sized companies. Of these, the Access SEAF funds and Summa have private pension fund investors. Access SEAF manages \$80 million of debt and equity in its funds (investing in both Peru and Colombia) and has made 12 investments in nine companies in Peru with a total investment of \$29 million to date.

Future Directions

A key question is the extent to which larger supplies of private equity capital from Peru's pension funds are likely to affect the early-stage SME sector, which generally has more modest financing needs and is poorly suited to the mid- to later-stage deals that characterize private equity investing in Latin America and average \$1.5 million to \$4 million in Peru.¹⁸

ACCESS SEAF's first fund, FTP, closed its investment phase in 2008 and included deals in the \$1 million to \$2.5 million range in sectors like agroindustry, logistics, tourism, and clean energy. Access SEAF's Latam Funds, a total of \$45.5 million in co-investment vehicles, invested in a sustainable forestry and environmental services company (totaling \$8.4 million) and a series of run-of-the-river hydro facilities (totaling \$6.1 million) among other investments. Although larger than the investments in FTP, these fall below the \$15-20 million threshold for the larger regional private equity funds operating in Peru. Latam's investors include COFIDE, two AFPs, and three international development finance institutions from Belgium, Finland, and Switzerland.¹⁹

Other countries in Latin America, including Brazil, Colombia, and Chile, have policies directed more explicitly to stimulating early-stage venture capital deals, including through state-supported fund-of-funds vehicles. In 2007, the Invertir Institute was created in Peru to advocate specifically for these types of initiatives. Invertir has institutional support from the Association of Promoters of Capital Market (Procapitales) and has a mission that includes conducting additional research and promoting training and technical assistance for SMEs. In a recent research report, funded in part by the United States Agency for International Development, Invertir argues for the creation of a fund-of-funds for the development of SMEs, to be housed in Peru's COFIDE.²⁰

A final challenge, specifically in the pension fund arena, is bringing institutional certainty to the country's commitment to investing pension fund assets in private markets. The recent capping of pension fund investments in alternative assets is reportedly a result, in part, of the departure of an especially supportive Superintendent of Banking and Insurance.

¹ WSJ.com, "LatAm Pension Funds To Invest In Private Equity-Peru Regulator," May 26, 2010. The article quotes Melvin Escudero, the head of the Peruvian banking, insurance, and pension fund regulator.

² Ibid.

³ Latin American Venture Capital Association, "The Private Equity and Venture Capital Environment in Latin America, 2010 Scorecard," lavca.org/2010/04/21/2010scorecard

⁴ United Nations Industrial Development Organization, www.unido.org.

⁵ International Monetary Fund, "Peru: Staff Report for the 2010 Article IV Consultation," IMF Country Report No. 10/98, April 2010. The recently announced merger of the Peruvian stock exchange with those of Chile and Colombia may change this by deepening the community of potentially interested investors.

⁶ Roberto Zavatta, "Financing Technology Entrepreneurs & SMEs In Developing Countries: Challenges And Opportunities, Peru Country Study," (Infodev, June 2008), www.infodev.org/en/Document.548.pdf.

⁷ Ibid.

⁸ Daniel Drosdoff, "A Pension Reform Begins to Bear Fruit," IDBAmerica, December 2005, www.iadb.org/iadbamerica/index.cfm?thisid=3797

⁹ Federación Internacional de Administradoras de Fondos de Pensiones, www.fiab.cl

¹⁰ Arthur E. Guillermo, "Pension Reform in Latin America: Experiences and Lessons," Federación Internacional de Administradoras de Fondos de Pensiones, September 2005.

¹¹ Ibid.

¹² Roberto Zavatta.

¹³ Ibid.

¹⁴ Latin American Venture Capital Association, "The Private Equity and Venture Capital Environment in Latin America, 2010 Scorecard," April 2010, lavca.org/2010/04/21/2010scorecard

¹⁵ Cate Ambrose, "An Agenda For Private Equity And Venture Capital In Latin America," Thunderbird School of Global Management Quarterly, Spring 2009.

¹⁶ WSJ.com, "LatAm Pension Funds to Invest in Private Equity-Peru Regulator," May 26, 2010. The article quotes Melvin Escudero, the head of the Peruvian banking, insurance, and pension fund regulator.

¹⁷ Roberto Zavatta.

¹⁸ Ibid.

¹⁹ ANDINA-Peru news Agency, "Peru Latam Fund Plans to Invest \$45 Million in Various Sectors in Peru until 2011," February 4, 2010.

²⁰ www.invertir.org.pe, accessed August 6, 2010.

CASE STUDY 5:

Clean Development Mechanism (CDM)



GEOGRAPHY	Brazil/ International
POLICY TYPE	Regulation
POLICY MEANS	Directing Capital

DESCRIPTION

Creates a mechanism based on tradable emissions reduction permits for financing low-carbon development projects in emerging markets

LESSONS FOR THE FIELD

- **Coordination:** In order for developing and transitional economies to take advantage of project-based carbon financing, a strong regulatory and institutional framework for streamlining project flow must be present.
- **Implementation:** Rigorous project approval processes have created political risk for investors, but have arguably resulted in higher quality projects from an emissions reduction perspective.
- **Commitment:** Global policy uncertainty has made the future of CDM, and carbon-based assets in general, unclear. A carbon pricing scheme that attracts investment on a large scale will require multilateral government commitment to reduce emissions.

IN BRIEF

The CDM, one of the central features of the Kyoto Protocol, established a means by which industrialized nations could purchase emissions reduction credits from clean development projects in developing nations, where the cost of abatement is lower (by 50 to 75 percent, according to some estimates).¹ In principle, the resulting market for Certified Emission Reductions (CERs) allows nations with emissions caps to meet their emissions reduction targets at lower cost, and channels investment capital and clean technologies directly to developing nations via sustainable development projects.

Brazil was instrumental in the creation of the CDM at the Kyoto negotiations, and was an early adopter of the mechanism. It acted quickly to develop the national infrastructure and capacity to oversee the complex process of project approval, validation, registration, and monitoring of CDM projects and has benefited from more than \$1.5 billion of direct investment in development projects, although the future of the CDM as a source of impact investing capital is uncertain.

Policy Context and Development

As part of the Kyoto Protocol agreement, 38 advanced industrialized “Annex B” nations committed in 1997 to binding emissions targets for a four-year commitment period (2008-2012). The CDM is one of three Kyoto Protocol “flexibility mechanisms,” designed to help these countries achieve their commitments at lower cost.

Brazil played a key role in negotiating the CDM, and established a designated national authority as early as 1999 to manage the complex process of project approval, registration, and monitoring. In general, investors believe Brazil’s institutional framework for supporting and implementing the CDM to be largely effective, and this has contributed to its success as an originator of CDM projects.²

The “flexibility mechanisms”, including both CDM and Joint Implementation (JI), were subject to much debate and criticism from environmental interests and representatives of developing nations, who viewed them as a way for industrialized nations to escape their domestic obligations to reduce emissions.³ In principle, any non-Annex B country can host a CDM project, although only three countries—China, India, and Brazil—originate the vast majority of projects, largely because of their investment climate and aggressive public promotion of the mechanism as a means of financing clean development.

Brazil’s initial proposal for a flexibility mechanism for Kyoto consisted of a “Green Investment Fund” for financing clean development projects in developing nations. Industrialized nations out of compliance with their emissions targets would capitalize the fund in proportion to the size of their violation. The proposal met with resistance from the US, which preferred a trading scheme to help developed nations achieve compliance over a penalty for failure to comply. The US never ratified the Kyoto Protocol, but that does not preclude investors from investing in CDM projects abroad.

Implementation

The CDM’s design reflects the hope that resulting development projects be more than merely a way for the global North to buy its way out of climate change obligations at the lowest possible cost. A project design must incorporate a baseline emissions scenario and reduction monitoring plan, as well as a “proof of additionality” demonstrating that the project could not be financed without CDM credits. The host country must approve the project, and the CDM executive board must validate and register it. Independent, third-party monitoring of emissions is required to verify and quantify the reduction of emissions.⁴

Carbon Emission Reduction certificates (CERs) are issued to project developers and sold either to investors in the project or to the secondary market. Governments seeking to fulfill emissions targets ultimately purchase them, enabling project developers to recoup a portion of financing costs. Some investors will make advance payments for certificates to help finance projects, although these represent a significant risk to the investor if the project fails.⁵ Increasingly, the market for CERs has evolved to look like a commodity market, with payment-on-delivery contracts structured to limit risk to investors, making it difficult for project developers to use them as a means of closing financing gaps on the front end.

POLICY IN ACTION:

Equipav Bagasse Cogeneration Project (EBCP)

Bagasse is a natural by-product of cane sugar production, and serves as a biomass fuel for steam-generation of electricity. Equipav, a Brazilian producer of cane sugar and ethanol, proposed to increase efficiency in the existing bagasse cogeneration facility of its sugar mill in Promissao, resulting in the export of sustainably generated power to the national grid.

EBCP was approved by the CDM executive board to issue 183,834 CERs over two consecutive issuance periods from 2002 to 2007, and is currently seeking approval for a third issuance.

Brazil established its Designated National Authority (DNA) in 1999 to oversee implementation of CDM projects. In addition, there are more than 50 CDM project consultant companies in Brazil, and eight Designated Operational Entities (DOEs) authorized to validate and verify CDM projects. On the purchase side, the UK and Japan are the largest buyers of CERs: together, they constitute 56 percent of the global market for CDM offsets.

The “additionality” criterion of the CDM is meant to ensure “beyond a doubt” that CDM reductions would not have occurred otherwise. Yet the counterfactual—what would have happened in the absence of a project—is not observed and impossible to prove, which leaves the establishment of a baseline open to abuse and manipulation. The implementation process was designed with this problem in mind, but as a result has been slow and cumbersome, and many potentially beneficial projects have had difficulty getting approved.⁶

In general, delay and failure of CDM project validation and registration represent the greatest risk to investors in this market. In Brazil, as in other CDM countries, fewer than 50 percent of validated projects make it to the registration phase,⁷ and most CDM projects have underdelivered on emissions credits.

Impact

In terms of nonfinancial impact, it’s possible to view the relative success of the CDM along several dimensions: carbon emissions mitigation, the facilitation of a global transition away from fossil fuels, and the positioning of developing nations as early movers in a renewable energy economy. On all three dimensions, the results have been somewhat disappointing, in large part because a true global consensus on emissions reduction has yet to materialize.⁸ Risk-adjusted estimates put collective global reductions through 2012 at about 1.5 billion tons of CO₂e (approximately the amount of Japan’s annual emissions).⁹

Nevertheless, Brazil has been one of the few countries to benefit, together with China and India.

CDM Project Activities in Brazil by Type 2010				
*Reductions are calculated for the first crediting period (7-10 years)				
REGISTERED/UNDER VALIDATION PROJECTS	PROJECTS	EMISSION REDUCTION* (In Tons)	PERCENT TOTAL	PERCENT GHG REDUCTION
Renewable Energy	228	146,091,126	50.3	37.5
Swine	75	38,998,139	16.6	10
Landfill	36	84,210,095	7.9	21.6
Industrial Process	14	7,449,083	3.1	1.9
Energy Efficiency	28	19,853,258	6.2	5.1
Waste	17	5,002,110	3.8	1.3
N2O Reduction	5	44,617,272	1.1	11.5
Fossil Fuel Switch	45	27,630,240	9.9	7.1
Reforestation	2	13,033,140	.4	3.3
Fugitive emissions	3	2,564,802	.7	.7
TOTAL	453	389,449,265	100.0	100.0

Source: UNFCCC

CDM projects represent a significant capital investment in Brazil’s climate-smart growth, both as direct capital investments and as leverage for additional capital. Brazil accounts for nearly 10 percent of the total volume of CERs issued worldwide—127.8 million CERs to date—which, at the current price of around \$12, represents more than \$1.5 billion of direct investment in Brazilian development projects, and even more in additional leveraged capital.

The emergence of a secondary commodity market for carbon credits has in many ways been an unintended consequence of the CDM, and has taken the place of the investment-for-

credits model that the framers originally envisioned.¹⁰ Another consequence of the Protocol’s limited time-horizon has been the types of projects financed through the CDM: fuel-transfer and energy efficiency projects have never achieved the expected popularity, in part because these projects take longer to complete, thus limiting the amount of reductions they can achieve before 2012.¹¹

Future Directions

There has been considerable debate about the extent to which the CDM's objectives have been achieved. The mechanism reflects one of the fundamental tensions of the global climate change debate: the need for efficiency in mitigation of greenhouse gases on the one hand, and the need to incentivize long-term sustainable development on the other. Most observers agree that, whatever else they may be, the CDM and similar emissions-trading schemes are ineffective at driving innovation in clean technology, one of the cornerstones of long-term sustainability.¹²

One clear lesson from any project-based emissions-trading scheme is that not all projects are created equal in terms of long-term sustainability. Although some of the largest projects have eliminated the equivalent of hundreds of thousands of tons of GHG emissions, they have not always contributed to development or innovation in renewables, or to the transition away from fossil fuels. By design, the mechanism encourages investors to seek projects with the highest carbon reduction potential at the lowest cost using existing technology. In theory, as the cost of additional reductions increases, overall returns to investment in CDM projects are likely to decline. Rather than being a sustainable or desirable solution to climate change, they have proven little more than inexpensive alternatives to emissions abatement in industrialized nations.

For Brazil, the CDM has largely been a success, although its future as a source of clean development capital is uncertain. Although the Kyoto Protocol was envisioned as the first step towards global cooperation on climate change, an international agreement beyond 2012 will be required to send long-term price signals on carbon-based assets. Currently, the global carbon market is too volatile and undersubscribed to attract significantly more capital, and the 2009 Copenhagen talks on a post-Kyoto climate change agreement have offered little encouragement to investors. The rapidly falling price of CERs relative to other, more stable carbon-based assets reflects this reality. Beyond 2012, demand for project-based emissions reduction credits, and the financing that accompanies them, are no longer certain.¹³

¹ Robert Repetto, "The Clean Development Mechanism: Institutional Breakthrough or Institutional Disaster?" *Policy Sciences* 34, no. 3 (2001): 303-27.

² Deutsche GTZ. "CDM/JI Initiative Country Study: Brazil," 2008, www.jiko-bmu.de/files/basisinformationen/application/pdf/cdm_market_overview_brasilien.pdf

³ Franck Lecocq and Philippe Ambrosi, "The Clean Development Mechanism: History, Status, Prospects," *Review of Environmental Economics and Policy* 1 (2007): 134-51.

⁴ Perspectives GmbH. "Clean Development Mechanism and Joint Implementation: Economic Potentials and Practical Requirements of the Kyoto Mechanisms in Business Practice," www.perspectives.cc/home/groups/7/Publications/CDM_Intro_engl_V2.pdf

⁵ Germany Trade & Invest and KfW Bankengruppe, "CDM Market Brief: Brazil," October 2009, www.gtai.de/DE/Content/SharedDocs/Anlagen/PDF/CDM/cdm-markt-brasilien-english,templateId=raw,property=publicationFile.pdf/cdm-markt-brasilien-english

⁶ Lecocq and Ambrosi.

⁷ Andres Santhiago de Oliveira, "Brasil and CDM" (presentation to UNCTAD Expert Meeting on Trade and Climate Change, Brazil Ministry of Science and Technology, April 27, 2009).

⁸ World Bank Group, *World Development Report 2010: Development and Climate Change* (Washington, DC: 2010).

⁹ Joe Romm, "CDM: Rip-offsets or Real Reductions?" *Climate Change Progress*, July 15, 2009, climateprogress.org/2009/07/15/internationalthe-cdm-rip-offsets-or-real-emissionreductions

¹⁰ Lecocq and Ambrosi.

¹¹ ICF International, "Carbon Funds Outlook: 2009," www.icfi.com/markets/energy/doc_files/carbon-procurement-guide.pdf

¹² Mike Hulme, "After the Crash: A New Direction for Climate Policy," *BBC*, May 11, 2010, news.bbc.co.uk/2/hi/science/nature/8673828.stm

¹³ World Bank Group, *State and Trends of the Carbon Market: 2010* (Washington, DC: 2010).

CASE STUDY 6:

Community Interest Companies



GEOGRAPHY	United Kingdom
POLICY TYPE	Regulation
POLICY MEANS	Demand Development

DESCRIPTION

Corporate form for social enterprise, bridging traditional businesses and charities

LESSONS FOR THE FIELD

- **Implementation:** A willingness to adjust policy in a thoughtful and speedy manner when problems arise is important to the policy's success, as evidenced by the CIC regulator's increase in dividend caps in response to investor and entrepreneur feedback.
- **Coordination:** Although a combination of narrowly targeted policies around a particular issue can help to create a stronger policy environment and achieve impact goals, new policies may be unnecessary. In this case, it may be more effective to revise and reinvigorate the existing industrial and provident society corporate form.

IN BRIEF

The Companies (Audit, Investigations, and Community Enterprise) Act of 2004 established community interest companies (CICs), which are limited companies designed specifically to operate for the benefit of the community. CICs occupy the realm between charities and corporations. They are attractive to those entrepreneurs and investors who want to work for social benefits with the relative freedom and sustainability of being incorporated as a limited corporation instead of as a charity. Since the passage of the Act in 2005, more than 4,000 CICs have been created. To date, their ability to attract private investment has been mixed at best, but recent revisions concerning dividend payments by the CIC regulator and stability through the financial crisis may portend a better future.

Policy Context and Development

The UK has been committed to advancing social enterprise since the 1990s. Social enterprises, which the government defines as “organizations which trade like mainstream businesses to build long-term sustainability, but which operate for a social purpose and use their profits for this end,” are key to the government’s goal of strengthening the nonprofit sector.¹ In the early 2000s, the UK government convened a Social Investment Task Force and created a Social Enterprise Unit within the Department for Trade and Treasury, both institutional examples of innovative efforts to help the country strengthen communities and create wealth, economic growth, and employment.

The CIC as a legal form emerged from this wider debate around how to create a more enabling environment for social enterprise during consultations between the government and the social enterprise sector from 2002 to 2004.² At the time, the only legal forms available to social entrepreneurs were charities and Industrial and Provident Societies (IPs), a form of cooperative that dates back to the 1850s. IPs with asset locks, a tool that prohibits specified assets from being used for unintended purposes, are referred to as community benefit societies and are legally designated as tax-exempt charities. The CIC was created to provide social entrepreneurs with another legal form that offered more flexibility, choice, and ease of incorporation, while emphasizing transparency, accountability, and public benefits.³

CICs were designed as a quick, simple, and inexpensive way to set up a social enterprise while allowing for flexibility in organization and the security of limited liability.⁴ They are different from ordinary corporations in two major ways: they have an “asset lock,” which requires that all assets and profits be permanently retained within the company and used exclusively for community benefit; and they have greater transparency requirements regarding use of assets and directors’ remuneration and are required to produce a public community benefit report annually. Within the CIC form there are two options for structure around limited liability: the company can be set up to be limited by guarantee (debt based, and the most common option thus far) or limited by shares (equity based, which is less popular). Dividends paid to shareholders by CICs limited by shares are capped, up to a maximum aggregate dividend as a percentage of profits. There is also a cap on performance-based interest on debt.⁵ Because the CIC is designed first and foremost as a business operation, it has received no government tax benefits.⁶

Implementation

CICs exist in 14 different sectors of work, although the vast majority are involved in “Other Social and Personal Services”, “Education, Health and Social Work”, and “Real Estate and Renting”. The majority of the 3,572 CICs registered as of April 2010 are based in England. An increasing number of CICs have been approved each year, but it is clear that the recent financial crisis has had a negative effect on the total number of CICs in existence: for example, although 1,296 CICs were approved between April 2009 and March 2010, 372 CICs were dissolved in the same period.⁷ The CIC Regulator views this favorably, as more CICs were approved than in the previous year, and the rate of dissolution was lower than the rate for UK companies generally.

POLICY IN ACTION:

Water Power Enterprises (h2oPE)

h2oPE is a CIC limited by shares that works to develop small-scale hydroelectric sites throughout the UK. It sets up community-based Industrial and Provident Societies to help fund and oversee the sites, while operating as the project manager. h2oPE’s third scheme is scheduled to start in early 2011 in Bainbridge, North Yorkshire. Previous projects are up and running in New Mills, Derbyshire and Settle, North Yorkshire. h2oPE has successfully raised hundreds of thousands of pounds to fund community-based hydro projects.

The minimum investment in a CIC is set at £250 (\$402) and the maximum at £20,000 (\$32,300), making it widely accessible to investors. The CIC form also falls under the Enterprise Investment Scheme, allowing investors in CICs to claim an income tax credit of up to 20 percent of their initial investment.⁸

When CICs debuted in 2005, their dividend cap rates were linked to the Bank of England base rate, with the share dividend cap 5 percent higher than the base rate and the performance-based interest rate 4 percent higher than the base rate.⁹ This cap, which was 9.75 percent in 2005, was intended to rein in excessive profit-sharing and protect the community benefit side of the operation. Unfortunately, the slashing of the base rate in response to the financial crisis to historic lows (currently at 0.5 percent since March 2009) was perceived to unfairly limit CIC returns.¹⁰

A consultation with investors and CICs in 2009 found that most social investors thought the caps were too low, and the differential between debt and equity finance caps was not enough to incentivize equity investment.¹¹ There were almost no investments in share capital for CICs at year-end 2009.¹²

Impact

It is difficult to tell whether the creation of the CIC legal form has increased the creation of social enterprises or merely drawn social entrepreneurs away from registering as charities or community benefit societies under IPS. It is also difficult to calculate how much capital has been invested in CICs, let alone how much might have been deployed elsewhere. The variation in disclosure on community operations via annual reports also creates challenges in evaluating the effectiveness of CICs in serving their targeted communities.

Although the CIC form has been popular to an extent, more information is needed to judge the effectiveness of CICs in expanding the social enterprise sector.

Future Directions

In January 2010, the CIC Regulator announced that the dividend cap was being decoupled from the base rate and raised to 20 percent of each share, while the loan interest rate was raised to 10 percent of the loan value.¹³ The Regulator has received praise for acting in the spirit of entrepreneurship and adjusting regulations when confronted with problems. The simplification and increase of the caps has generally been received as a positive development, and it is likely to increase equity (and debt) investments in CICs.¹⁴ If the number of CICs continues to grow and awareness about them continues to spread, they will likely gain in popularity and attract additional investors. The 10 percent increase in the capital gains tax in June 2010 also has the potential to attract more investors to CICs as the wealthy seek out tax credits and ways to alleviate their tax burden.¹⁵ There is no evidence to suggest that demand for CICs will abate, or that there are movements afoot to repeal its existence as a legal form.

Creating new legal forms for social enterprise is not a new phenomenon: Italy was among the first to do it in 1991 with the social solidarity cooperative, and Spain and France have introduced their own as well. In the US, the low-profit limited liability company (L3C), an effort to capture foundation investments, has not been especially successful. A similar project, the B corporation, is gathering some legislative momentum, but its effect on investment remains in doubt. The UK differs from these countries in its social enterprise policy, which encompasses not only CICs but initiatives and new institutions in social finance, public sector innovation, capacity building, and research, to an extent that does not exist elsewhere.¹⁶ Given the UK government's widespread push toward social enterprise, even if the CIC as a legal form fails, the proliferation of government policies in support of social entrepreneurship means that one or more will likely be effective and lead to growth in the sector.

¹ Malcolm Lynch, "For and Against the Community Interest Company," *Investment Matters* 28 (January 2004), www.caledonia.org.uk/papers/Community%20Interest%20Company.pdf

² Alex Nicholls, "Institutionalizing Social Entrepreneurship in Regulatory Space: Reporting and Disclosure by Community Interest Companies," *Accounting, Organizations and Society* 35 (2010): 394-415.

³ *Ibid.*, 396, 400.

⁴ *Ibid.*, 397.

⁵ Regulator of Community Interest Companies, "Information Pack: Community Interest Companies" (London: March 2010), www.cicregulator.gov.uk/CICleaflets/CIC%20INFORMATION%20PACK%20V00.04%20Final.pdf

⁶ Nicholls, 396.

⁷ Regulator of CICs, "Operational Report: Fourth Quarter 2009-2010," (London: April 2010), www.cicregulator.gov.uk/news/Quarterly%20Report/Quarterly%20Report%20-%20January%20to%20March%202010.pdf

⁸ Miles Brignall, "Ethical Investment Schemes Offer Power to the People," *The Guardian*, May 29, 2010, www.guardian.co.uk/money/2010/may/29/ethical-investments-communities-environment

⁹ Regulator of CICs, "Information Pack."

¹⁰ Chrisanthi Giotis, "'Brave' Changes Will Boost Investment into CICs," *Social Enterprise Live*, January 5, 2010, www.socialenterpriselive.com/section/news/policy/20100105/brave-changes-will-boost-investment-cics

¹¹ Paul Jump, "CIC Caps Unpopular, Consultation Reveals," *Third Sector Online*, October 20, 2009, www.thirdsector.co.uk/news/archive/946370/CIC-caps-unpopular-consultation-reveals/?DCMP=ILC-SEARCH

¹² David Ainsworth, "Payment Cap Lifted for Community Interest Companies," *Third Sector Online*, January 6, 2010, www.thirdsector.co.uk/News/DailyBulletin/975996/Payment-cap-lifted-community-interest-companies/407552A7FBE5AAD8AD19A1311447F699/?DCMP=EMC-DailyBulletin

¹³ *Ibid.*

¹⁴ Giotis.

¹⁵ David Teather, "Capital Gains Tax Rises to 28% for Higher Earners," *The Guardian*, June 22, 2010, www.guardian.co.uk/business/2010/jun/22/budget-capital-gains-tax-rises; Brignall, "Ethical Investment."

¹⁶ Nicholls, 395.

CASE STUDY 7:

Green Funds Scheme



GEOGRAPHY	Netherlands
POLICY TYPE	Tax Credit
POLICY MEANS	Directing Capital

DESCRIPTION

Tax incentives to support environmentally friendly projects

LESSONS FOR THE FIELD

- **Targeting:** What the policy gains in its specificity and narrow focus—a discrete and manageable program attractive to many individual private investors—it loses in scalability by excluding other potential investors, projects, and funding mechanisms.
- **Implementation:** For this program to succeed, it requires coordination among a number of government agencies as well as with large private banking institutions. Although it is a potentially laborious process, this sharing of duties separates the oversight and implementation workload into manageable parts.

IN BRIEF

The Netherlands’ Green Funds Scheme, or Regeling Groenprojecten, is a combination tax credit and tax exemption given to investors and savers of all sizes who invest in “green funds,” as defined by the Ministries of the Environment, Finance, and Agriculture. The program provides a secure investment for investors while decreasing the costs of finance for eligible environmentally friendly projects. Since the program’s implementation in 1995, 234,400 individuals have invested more than €6.8 billion in green funds, financing more than 5,000 projects.¹

Policy Context and Development

The Green Funds Scheme is the result of governmental support for market-based projects that result in positive effects on the environment. The government introduced the program in 1995 to promote sustainable economic production and growth.² It aimed to support access to finance for environmentally worthwhile enterprises in accordance with national policy, and to increase individual awareness of environmental issues. The targeted projects are on the cusp of viability. Although they are low-profit, they have the potential to be self-sustaining and need assistance to cover high up-front costs. Examples of such projects include sustainable housing, agriculture, and wind energy.

The collaborative and progressive format of this regulation is a result of the Dutch history of consensus decision-making and action, as well as social and environmental awareness. The inclusion of social issues in investment decisions in the Netherlands dates back to the mid-20th century, and as of the end of 2007, the socially responsible investment industry in the Netherlands was one of the largest in the world, at €435 billion (\$613 billion).³ Although the vast majority of this market is due to the simple exclusion of weapons from portfolios by the country's largest pension funds, there is still evidence of broad-based support for social and environmental issues.

Since its introduction in 1995, the Green Funds Scheme has faced only one major challenge—the adjustment of the tax system in January 2001. That year, the Dutch government revised the calculation of income tax in such a way that it threatened to reduce the tax advantage derived from investment in green funds. In response to strong parliamentary, press, and public support for the program, the Parliament introduced new regulations designed to counteract the negative effects of the new tax system and ensure the continued viability of the Green Funds Scheme.⁴

POLICY IN ACTION: Triodos Groenfond

Triodos Bank founded the first green fund in the Netherlands in 1990, and merged its three existing green funds in 1998 to create Triodos Groenfond, which currently manages €557.2 million in assets (\$785 million). More than 70 percent of the fund's portfolio is invested in renewable energy, sustainable farming, and green building projects. Triodos has been a strong supporter of the Green Funds Scheme.

Implementation

The Green Funds Scheme allows investors to invest in specific “green funds” at designated banks, which then finance environmental projects. The interest rate that investors receive is set lower than conventional rates to allow banks to offer cheaper loans to green projects. This lower interest rate is offset by a tax credit and waiver of taxes on dividend and interest payments. This program expands the availability of financing to projects that might not qualify under conventional lending standards.⁵

Banks that participate in this program are called green intermediaries; the Ministry of Finance decides whether or not an intermediary qualifies as green. To qualify as green, the intermediary, or fund, must allocate 70 percent of assets to green projects. For risk mitigation purposes, green intermediaries can allocate at most 30 percent of their green funds portfolio to nongreen projects. As of the end of 2008, there were eight green intermediaries, representing essentially all of the Netherlands' major banks: ABN AMRO Groenbank, ASN Groenprojectenfonds, Fortis Groenbank, Fortis Groen Fonds, ING Groenbank, Nationaal Groenfond, Rabo Groen Bank, and Triodos Groenfond. Major banks participate in the program because it is profitable, because customers demand it, and because it makes for good public relations.

The Ministry of Housing, Spatial Planning, and the Environment, the Ministry of Finance, and the Ministry of Agriculture, Nature, and Food Quality are all participants in oversight of the scheme. Green projects must receive a green certificate from the Ministry of the Environment after meeting specific criteria, including a high level of environmental benefit, a low level of economic output, the ability to be economically self-sufficient, and a use of applied technology or methods not yet commonly used.⁶ The certificate is valid for up to 10 years.⁷ The program aims for self-sustaining projects that are unlikely to find financing without the reduced loan rate. Projects with long lifetimes and low operating costs, yet high upfront capital needs, have especially benefited from the scheme.⁸ Required returns for the projects are set so that each investment has a positive return, but not so high that it could be financed commercially. Loans from green funds may not account for the full amount of the project; on average, they are only 75 percent of the total costs. Green projects are subject to the same economic examination by banks as nongreen projects.

Green projects may be located abroad, but very few ever are because of complications with administration and difficulties adequately assessing the economic and political risk of projects in other countries.

Impact

The Green Funds Scheme is generally accepted as a success. Although only 1.4 percent or so of the Dutch population actually participates in the program, as of 2008 they have contributed more than €6.8 billion (\$9.6 billion) since 1995 for the financing of 5,000 projects that conceivably would not have existed otherwise.⁹ Between 1995 and 2003, the Green Funds Scheme was responsible for more than half of the growth of socially responsible savings and investments in the country.¹⁰ The vast majority of projects funded under this program are focused on organic agriculture and green greenhouses as well as renewable energy and nature conservation.¹¹ These projects have led to environmental improvements and reductions in carbon emissions.¹²

The scheme has been successful from an economic perspective because it is strongly connected to the mechanisms of traditional lending and investment, with funds allocated on a market-driven basis, close to average economic returns, and with minimal governmental costs.¹³ A 2007 study found that the financial performance of green funds investments barely deviated from that of more traditional investments.¹⁴ The commitment and cooperation of all parties involved in the program have been particularly important to its success. What was originally expected to involve no more than €400 million (\$564 million) has grown precisely because there has been so much public demand for additional funds.¹⁵ It seems that there is an added attractiveness to these low-risk, average-return investments if they demonstrate a positive contribution to society.

A disadvantage of the program is that it is so narrowly construed. It is targeted at individual investors, limited to soft loans, and restricted to projects that can support themselves over time. As a result, it excludes a large number of both beneficial projects and potential investors. For some investors, the financial incentive might not be high enough, and for some project owners, the lower tax rate still may not be feasible.

Although the system may be applicable in other countries, it depends strongly on the willingness of the government and banking industry to work together, an appetite from investors for these products, and a tax regime that is amenable to the credit structure.

Future Directions

It appears that the Green Funds Scheme has staying power, but its viability and usefulness moving forward remain to be seen due to its narrow focus. The extent to which the policy is perceived to serve as a valuable force in encouraging investment in the environment will determine its continuation. As with any publicly funded program, its future is in the government's hands, and the policy may be modified or ended.

The success of the program in the 1990s and early 2000s spurred the government of the Netherlands to clone it in the form of a Social-Ethical Fund program, created in 2004 to support entrepreneurs in developing countries. This program, however, has not been popular, most likely as a result of concerns over political and economic risk assessment. In 2009, the European Commission announced its own version of a green funds program, modeled after the Dutch experience, with some modifications.¹⁶

¹ European Commission, "State Aid: Commission Approves Dutch Green Funds Scheme for Environmentally-Friendly Investment Projects" (press release, October 14, 2009).

² Bert Scholtens, "What Drives Socially Responsible Investment? The Case of the Netherlands," *Sustainable Development* 13 (2005): 129-37; Bert Scholtens, "Financial and Social Performance of Socially Responsible Investments in the Netherlands," *Corporate Governance* 15, no. 6 (2007); Theo van Bellegem, "The Green and Social Fund System in the Netherlands, Cooperation between Public and Private Sectors" (Council of Europe Forum, Strasbourg, France, November 4-5, 2004).

³ Scholtens, "Financial"; Eurosif, "2008 European SRI Study" (Paris: 2008), www.eurosif.org/publications/sri_studies

⁴ van Bellegem, 244.

⁵ International Energy Agency, "Global Renewable Energy Policies and Measures: Green Funds" (Paris: 2004), www.iea.org/textbase/pm/?mode=re&id=1160&action=detail

⁶ van Bellegem, 241.

⁷ International Energy Agency; Scholtens, "What Drives," 130.

⁸ van Bellegem, 235-43.

⁹ Ministry of Housing, Spatial Planning, and the Environment, "Groen Beleggen, Annual Report 2008" (Amsterdam: 2008), www.senternovem.nl/mmfiles/GBJaarcijfers20081_tcm24-307369.pdf

¹⁰ Scholtens, "What Drives," 130.

¹¹ Ministry of Housing.

¹² Scholtens, "Financial."

¹³ Koert Jansen, "Some Thoughts on Mainstreaming Social Finance with the Help of Government: The Example of the Dutch Green Funds," in *Banking and Social Cohesion: Alternative Responses to a Global Market*, ed. Christopher Guene and Edward Mayo, 242-244 (Charlbury: Jon Carpenter Publishing, 2001).

¹⁴ Scholtens, "Financial."

¹⁵ van Bellegem, 239, 244.

¹⁶ Jansen, 244; European Commission.

CASE STUDY 8:

Feed-in Tariffs (StrEG and EEG)



GEOGRAPHY	Germany
POLICY TYPE	Subsidy
POLICY MEANS	Directing Capital

DESCRIPTION

Subsidy to support the development of renewable energy

LESSONS FOR THE FIELD

- **Commitment:** German feed-in tariff policy has lasted for decades because of widespread support from civil society, which has bolstered political support through a number of administrations.
- **Implementation:** German government has been responsive to concerns with various iterations of the country's feed-in tariff policies and has shown a flexibility and willingness to make adjustments speedily when issues arise, particularly with regards to subsidy prices.

IN BRIEF

Germany's two-decade-old feed-in tariff policy has been successful at increasing the country's production of renewable energy. At its most basic level, the policy increases the provision of renewable energy in the country by requiring utilities to connect renewable energy projects to the grid and purchase renewable energy at a federally fixed price for 20 years. The feed-in tariff, or minimum price standard, is based on the cost of generation, differentiated by type of technology and plant capacity, and reduced over time. The costs of subsidizing this program are distributed evenly on the payment bills of all electricity consumers except for energy-intensive industries; extra costs were approximately €6.00 (\$8.46) per household per month in 2010 and are projected to rise in 2011. Since 2000, cumulative investment in renewable energy has grown to €30 billion (\$42.3 billion), doubling employment in the industry to 300,000 and tripling installed renewable energy capacity.¹

Policy Context and Development

Germany's extractive energy resources, or lack thereof, help to explain the country's turn toward renewable energy. Germany's limited domestic oil production peaked in the 1960s, and the government put considerable effort into expanding alternative domestic energy sources, primarily coal and nuclear power.² The 1973 oil crisis sparked the introduction of renewable energy policy in Germany, beginning with promoting and subsidizing renewable energy research. This support for renewable energy was a largely nominal commitment to placate opposition to coal and nuclear power.³ A special energy tariff was introduced in 1979 to encourage the production of energy from cogeneration and renewable sources, but it did not spur much development as the program was financially unattractive and enjoyed little support from the nation's utilities.⁴

After the Chernobyl accident in 1986, Germany's parliamentary political groups introduced a number of bills intended to change the energy environment in favor of renewable energy.⁵ Despite opposition from a number of government agencies, including the Ministry of Economic Affairs, the majority of parliamentary parties and Chancellor Kohl were committed to creating markets for renewable energy, and the 1990 Stromeinspeisungsgesetz (StrEG) feed-in tariff law passed with relative ease.⁶

The success of StrEG led to a number of political and judicial attacks by German utilities, which were unsuccessful but had a negative impact on the market for renewable energy and investor security.⁷ Problems with the law emerged in the mid- to late-1990s with the liberalization of the electricity market and continuing complications stemming from reunification. Of central concern was the pegging of the tariff rate to the market price of electricity. In StrEG, the tariff rate was set at 80 percent of the average retail price of electricity. With the liberalization of the electricity market, the price of electricity fell, as did the tariff rate, and many renewable energy developers and investors lost money.⁸

The 1998 election brought a coalition of Social Democrats and Greens into power. The Social Democratic Party (SPD) was strongly in favor of strong renewable energy legislation, arguing that it would be in the long-term interests of German industry and employment.⁹ Even though the big utilities (and nonpartisan Minister of Economic Affairs) and the competition authorities of the European Commission remained strongly opposed to a feed-in tariff system, the SPD and Green alliance opted to stay the course, supported by important allies like the metalworkers union.¹⁰ The new feed-in tariff law, the Erneuerbare-Energien-Gesetz (EEG), passed successfully in April 2000.

As part of the EU, Germany is committed to a number of regional directives relating to renewable energy production, greenhouse gas reduction, and climate change, including commitments to have 18 percent of gross final energy consumption come from renewable sources (which was translated domestically into a target of a 30 percent share for renewable electricity) and reduce greenhouse gas emissions by 40 percent from 1990 levels by 2020. The feed-in tariff program operates within a wider policy environment that supports renewable energy production and is bolstered by subsidies, loan guarantees, building regulations, and research allotments.

Implementation

A key to the continued viability and success of the German feed-in tariff has been constant support from the public and the Bundestag.¹¹ When unexpected concerns arose from the implementation of StrEG in the 1990s and the law faced legal and political challenges from government ministries and large utilities, widespread popular and parliamentary commitment to renewable energy enabled the law to be retained with adjustments.

POLICY IN ACTION: Good Energies

Good Energies, a large global institutional investor in renewable energy and energy efficiency industries, announced that it had teamed up with the NIBC European Infrastructure Fund to acquire two solar photovoltaic plants in Germany. These plants are part of the world's largest operational solar photovoltaic plant. Although the purchase price is undisclosed, the plants are fully operational and benefit from a feed-in tariff for 20 years.

There are a number of feed-in tariff systems worldwide, but Germany's is considered a particularly good example. The system was well-designed to begin with, and a favorable political climate and openness to change by policymakers has enabled the law to respond quickly to problems with implementation as they arise. The way the tariff price has been handled is a prime example. In the 1990s, the tariff price was pegged to electricity prices, which caused a number of renewable energy developers and investors to lose money when the electricity market was liberalized. In response, the tariff was redesigned as a cost-plus price; instead of pegging tariffs to electricity prices, tariffs were set to cover the cost of production plus a profit of 5-7 percent.¹² This pricing system ensures that investors get a profit, reducing risk and avoiding the rapid market expansion and crash that occurred in Spain when tariff prices were set too high. EEG also calls for reviews of tariff rates every four years to reflect technological and price developments. Between those reviews, there is a schedule for the annual decrease in tariff levels for each year's generation of new installations (although levels remain constant for individual installations). This is meant to encourage technological advancement.¹³

The cost of subsidizing feed-in tariffs is distributed evenly across all electricity consumers, with large industrial companies able to apply for partial exemptions once their payments reach a certain level. The average added cost of this program for a household in Germany is currently about €6.00 (\$8.46) per month. A National Equalization Scheme sets the rates with an eye toward evening out costs across the country, so that the program does not disproportionately affect consumers in regions with larger renewable energy production capacity (such as wind in the North).¹⁴

A fixed price per kWh of renewable electricity, along with provisions that grid operators must buy all available renewable energy, ensures that investors know exactly what they are getting for the first 20 years that the project is operational. In exchange for a reduction in risk, investors take a slightly lower return.

In addition, the feed-in tariff has been complemented and supported by a number of other policies aimed at furthering renewable energy technology and usage.¹⁵ These policies, which exist at the state and federal level, include federal renewable energy research programs, reduced-interest loans for renewable energy installations from the federal government's banking institutions, and a modification of the planning law that privileged wind turbines under the construction code.¹⁶

Impact

Germany's feed-in tariff program has had a positive impact on job growth, the economy, and the environment. In 2009 alone, €20 billion (\$28.2 billion) was invested in renewable energy.¹⁷ Public support for the feed-in tariff law has been bolstered by tremendous job creation in a country long known for its industrial prowess. In 2004, the renewable energy industry employed 160,000 people; by 2009, that number had jumped to more than 300,000.¹⁸ Originally a way to address energy security issues, climate change, and the nuclear power problem, renewable energy has emerged in Germany (and Denmark) as a major player in industrial development and job growth.¹⁹ In Germany, this goal was stated explicitly in the 2000 EEG law.

The feed-in tariff's success in increasing installed capacity and actual generation volume of renewable energy, growing the manufacturing industry, attracting investment, and creating jobs has allowed it to survive major ideological changes in government.²⁰ In particular, investment in Germany's clean energy sector as a percentage of GDP is approximately two to three times greater than in the US, and the investment shows.²¹ Germany is a global leader in the production of wind and hydroelectric turbines as well as solar panels, and between 1997 and 2009 the country's share of renewable energy as part of total electricity consumption grew from 4.3 percent to 16.1 percent.

From an environmental standpoint, the law has also been effective at cutting greenhouse gases. In 2009, use of renewable energy prevented the emission of 108 million tons of greenhouse gas, which is roughly equivalent to 12 percent of Germany's total annual emissions.²²

Future Directions

As of September 2009, 44 countries worldwide had implemented a feed-in tariff, and an additional four had states or provinces with feed-in tariffs. Feed-in tariffs are especially popular in Europe, where 20 of 27 European Union countries have such programs.²³ Germany's experience with a feed-in tariff has encouraged many other nations to try them out, particularly as they are very flexible, can foster regional development, and are open to a range of technologies and project sizes, making implementation open to all different sizes of participants.²⁴

In Germany, EEG has survived two more changes in government with the elections of 2005 and 2009.²⁵ The small margin of victory in 2005 necessitated a coalition with Social Democrats, ensuring EEG's survival. In 2009, the election of a Conservative/Liberal government meant that critics of feed-in tariff policy had a favorable political environment to push for tariff reductions. Big utilities have stiffened their resistance to continued renewable expansion as their loss of market share has increased. However, domestic political support for the policy has continued to thrive, particularly given the recent rise in oil prices, natural disasters, and the BP Gulf oil spill.²⁶ Given the law's performance and tight ties with jobs and manufacturing, it is likely that the feed-in tariff will remain intact.

¹ As of 2008. Deutsche Bank Climate Change Advisors, "Paying for Renewable Energy: TLC at the Right Price" (Frankfurt: December 2009), 44.

² Volkmar Lauber and Lutz Mez, "Renewable Electricity Policy in Germany, 1974 to 2005," *Bulletin of Science, Technology and Society* 26, no. 2 (2006): 105-20.

³ *Ibid.*, 105.

⁴ Avoided costs are the costs the utility would have incurred by supplying the power itself or buying it from another source. Judith Lipp, "Lessons for Effective Renewable Electricity Policy from Denmark, Germany and the United Kingdom," *Energy Policy* 35 (2007): 5481-95.

⁵ Staffan Jacobsson and Volkmar Lauber, "The Politics and Policy of Energy System Transformation-Explaining the German Diffusion of Renewable Energy Technology," *Energy Policy* 34 (2006): 256-76.

⁶ Lauber and Mez, 105; Jacobsson and Lauber, 264.

⁷ That these challenges failed is a testament to public support for the law. A few, very large utilities relying heavily on coal and nuclear generation for power dominated Germany's electricity supply system. Until 1998, eight companies owned approximately 90 percent of the German power generation capacity. These companies saw renewable energy and the feed-in tariff not only as a direct challenge to their market share and business, but as an uneconomic way of running the grid and doing business. Ole Langniß, Jochen Diekmann, and Ulrike Lehr, "Advanced Mechanisms for the Promotion of Renewable Energy-Models for the Future Evolution of the German Renewable Energy Act," *Energy Policy* 37 (2009): 1289-97; Jacobsson and Lauber, 261, 265.

⁸ Lipp, 5488; Claus Huber and Mario Ragwitz, "Feed-In Systems in Germany and Spain and a Comparison" (Frankfurt: Federal Environmental Agency, 2005), www.bmu.de/english/renewable_energy/downloads/doc/35604.php

⁹ Jacobsson and Lauber, 267.

¹⁰ Lauber and Mez, 110.

¹¹ e-Parliament, "German FIT Toolkit" (Copenhagen: May 2008), www.e-parl.net/eparlimages/general/pdf/080603%20FIT%20toolkit.pdf

¹² Bruce Stokes, "What, Exactly, Is a Feed-In Tariff?" *National Journal*, April 25, 2009, p. 28.

¹³ Huber and Ragwitz, 4.

¹⁴ Deutsche Bank, 32; Huber and Ragwitz, 4.

¹⁵ Lipp, 5488.

¹⁶ Lauber and Mez, 108.

¹⁷ Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), "Renewable Energy Sources in Figures-National and International Development" (Berlin: June 2010), http://www.bmu.de/files/english/renewable_energy/downloads/application/pdf/broschuere_ee_zahlen_en.pdf, p. 9

¹⁸ Langniß, Diekmann, and Lehr, 1290; BMU, 27.

¹⁹ Lipp, 5492.

²⁰ *Ibid.*, 5488.

²¹ Deutsche Bank, 45.

²² BMU, 29.

²³ The first feed-in tariff, PURPA, which was started in the US in the 1970s, failed miserably. Renewable portfolio standards are far more popular in the US these days than feed-in tariffs. Miguel Mendonça, David Jacobs, and Benjamin Sovacool, *Powering the Green Economy: The Feed-in Tariff Handbook* (London: Earthscan, 2010), 78-79.

²⁴ Lipp, 5493.

²⁵ Lauber and Mez, 116.

²⁶ *Ibid.*, 115.

CASE STUDY 9:

Joint European Support for Sustainable Investment in City Areas (JESSICA)



GEOGRAPHY	European Union
POLICY TYPE	Public-Private Partnership
POLICY MEANS	Supply Development

DESCRIPTION

Capital and guarantees promoting collaborative sustainable development in Europe's urban areas

LESSONS FOR THE FIELD

- **Implementation:** In a union of nations such as the EU, successful policy design will reflect and work around the varying political and market realities within each individual state. Evaluation studies, carried out for each region interested in the initiative, help to tailor JESSICA appropriately for implementation.
- **Coordination:** The impetus for the development of JESSICA was a desire to convert traditional European Commission grant-funding to the urban sector into investment and to leverage and build upon European Investment Bank loans, in pursuit of more sustainable urban development. Given the scale of the project at hand, creating a program to bring in private investment that builds on existing publicly supported programs increases opportunities for success.

IN BRIEF

The European Commission has identified social investment in urban regeneration as a priority, and with the European Investment Bank (EIB)—which has as its own mandate for economic development, European integration, and sustainability—developed the Joint European Support for Sustainable Investment in City Areas (JESSICA) program. The program allows member states to redeploy funds formerly dedicated to grant-making as impact investments in urban regeneration funds that demonstrate triple-bottom-line investment returns.

JESSICA is designed to catalyze public-private partnership investments in projects that form part of larger municipal regeneration strategies. By providing early stage capital, taking on development risk, creating longer time horizons for returns, or navigating the complexities of large-scale urban infrastructures, for example, JESSICA funds may help projects with important social benefits to proceed that the market would not otherwise undertake. The EU hopes that JESSICA can make the use of public dollars in urban regeneration more efficient, leverage private capital for public goals, and create demonstration projects that help build private market capacity for environmentally sustainable urban regeneration investment.

Policy Context and Development

Eighty percent of EU citizens live in cities, and the environmental and social challenges associated with economic and social inclusion, climate change, and globalization require the EU to take an expansive view of how it can make the urban built environment more sustainable. A series of meetings, research projects, and declarations over the past decade has reinforced the idea of “sustainable cities” as core to the EU project.

JESSICA is a specific effort to introduce market-related investment strategies into the EU’s urban regeneration strategies. The goal of JESSICA is to develop investment vehicles—debt and equity—that take on a variety of risk and return profiles depending on geographic, project, public benefit, and other considerations. In theory, these should be particularly useful for those projects relatively near the border of commercial viability.

The European Commission has identified a number of benefits to this approach, including:

- Investment funds can be recycled for further urban regeneration activities
- The market mechanism will help public agencies use funds more efficiently
- Public investment dollars can leverage private-sector activity through public-private partnerships
- Private-sector expertise in infrastructure and real estate investment can be guided to public purpose through the EIB’s role in the partnership

Perhaps above all, the JESSICA program is seen as a way to maximize the benefit from public investments in the context of limited public resources.

These benefits stem from the context of real estate market failures in complex urban regeneration projects with triple-bottom-line profiles. For instance, the time horizons for investment returns from planning to completion may be particularly long; projects may require intense on-site engagement with public, private, and civil society stakeholders; development risk in projects that may have multiple real estate strategies is seen as higher; and projects in areas in need of urban regeneration may face market risk or cultural bias that keeps private-market investors from undertaking them. In these cases, the JESSICA program can provide equity or debt investments that allow for structured ways to integrate environmental and social criteria into project management, reduce risk through equity investment or loan guarantees, and create capacity for private-market actors who lack experience navigating regeneration projects.

Particular areas of investment focus include but are not limited to infrastructure investment, energy efficiency and alternative energy production, brownfield redevelopment, economic development, social service provision, and historical preservation.

POLICY IN ACTION:

Northwest Urban Investment Fund

In April 2010 the European Investment Bank announced the creation of a JESSICA-sponsored holding fund designed for urban regeneration projects in northwest England. The Northwest Urban Investment Fund is a partnership of the European Investment Bank (EIB), the European Regional Development Fund (ERDF), and the Northwest Regional Development Agency (NRDA), and will initially be capitalized at €100 million (\$141 million). The fund aims to provide a revolving source of capital that maximizes the benefit of public investment through longer term commitments to regional development. It plans to target redevelopment projects with the goal of creating 7,000 new jobs in the region.

Implementation

JESSICA is still under development, with implementation strategies under construction. But the early formulation of the project offers important insights into how private-market incentives are conceived.

In keeping with other EU concerns with urban regeneration, the JESSICA program focuses on projects that are part of a larger, comprehensive urban regeneration strategy for a city or region, although political expediency and the need to deliver results has somewhat compromised this lofty ideal. The theory is that projects outside of such comprehensive plans do not capture the full potential of public investment, either constraining their benefits to particular neighborhoods, or missing the benefits of positive externalities for entire regions.

JESSICA targets projects where there is the potential for payback for public investment, with concrete cash flow projections and the potential to capture the upside of land and building appreciation thanks to investment. This is a particularly thorny issue, as the appropriate risk/return profile for public purpose investments is difficult to calculate, will vary from project to project and place to place, and invokes sensitive issues of subsidizing private market returns. To date, the program has focused on remaining flexible, with a wide vision of what sorts of investments and returns are appropriate in a given situation. Different sorts of investments offer different public purpose advantages as well as return profiles. Equity investments offer the potential for long-term control and long-term return advantages, but are higher risk. Debt investments are easier to get up and running in the short term, but may not take on the risk necessary to catalyze private investment or offer the long-term participation in directing project goals.

Implementation is complicated by the fact that different regions in EU member states are likely to have very different capacities in supporting the financial engineering that the program envisions. The studies supporting implementation scored regions on their need for urban regeneration investments, but also on their history with financially engineering and public-private investment vehicles, to determine likely uptake of JESSICA funds. The lack of familiarity with public-private partnerships may itself be an important barrier to implementation in certain regions. Similarly, the complexity of investments, and their long-term time horizon, can be a barrier for public as well as private investment in urban regeneration.

Just as importantly, JESSICA depends on careful consideration of the return profile of investments under consideration. There are as of yet no clear criteria for measuring economic development, social, or environmental benefits, although a number of efforts are underway to improve the situation. Moreover, different cities and regions will have different needs for regeneration, and different capacities to deliver social and/or environmental benefits, making site selection and monitoring especially complicated.

In sum, creating a flexible program that determines how a project is best suited to a particular risk/return calculation and what public benefits to expect from that project remains a significant challenge for implementing the JESSICA program.

Impact

The impact of the JESSICA program is impossible to calculate at this juncture. In the first place, no clear criteria for investment, or for measuring success, have yet been determined. This is due to the difficult problems in measuring public benefits generally, and the complications with dealing with members states with very different infrastructure and real estate markets, investment needs, and capacity to absorb public-

private partnership investments. As concrete debt and equity investments are made, after the current phase of regional evaluation and pipeline development, an iterative process may help develop more effective triple-bottom-line impact measurements across the various regional projects associated with JESSICA.

To date, a range of evaluation studies, memorandums of understanding, and concrete development of holding funds for JESSICA investments are underway across EU member states. Although no evaluation of the effectiveness of investments is possible, it is clear that the program has, despite the financial downturn, built some investment platforms in the EU, and the downturn itself may direct more attention to JESSICA as a vehicle for making scarce public dollars go further toward urban regeneration.

Future Directions

The current environment makes forecasting future directions in a program like JESSICA, whose benefit is closely tied to the real estate market, particularly difficult. The program was designed to be flexible, and investments in energy efficiency in the built environment (for example, in Lithuania) demonstrate how to modify the program from its archetypal view of new development as the outgrowth of public investment in infrastructure. Much of the effectiveness of the program, in terms of creating impact investment markets, will depend on how private-market investment activity rebounds, and on the capacity of local governments to initiate and manage the public-private partnerships that the JESSICA funds are meant to support. More than 20 countries in the EU have engaged with JESSICA at various levels, and a number of so-called managing authorities have established holding funds. However, the extent of private-market uptake, and public benefit delivery, remains to be seen. This is to be expected in any case. The time horizon for urban regeneration means that it will take a long time to understand results: financial, social, and environmental.

CASE STUDY 10:

Broad-Based Black Economic Empowerment



GEOGRAPHY	South Africa
POLICY TYPE	Regulation
POLICY MEANS	Directing Capital

DESCRIPTION

Law promoting broad economic inclusion

LESSONS FOR THE FIELD

- **Coordination:** Government action has the potential to catalyze industry-driven initiatives, even if to forestall more widespread reform. The development of the Financial Sector Charter is an example of such an industry-led effort to avoid additional governmental regulation.

IN BRIEF

South Africa's 2003 Broad-Based Black Economic Empowerment (BBBEE) Act promotes the economic inclusion of the country's black population through targeted government procurement. The legislation requires that public institutions take into account black economic empowerment activities when contracting with, purchasing from, or licensing South African businesses. Part of the ruling party's national economic plan, this policy is a significant component of long-standing efforts to address inequities resulting from apartheid-era policies.

From an investor's perspective, the Act creates growth opportunities for black-owned businesses by shaping procurement in the public and private sectors and improves information about environmental, social and governance (ESG) performance through public disclosure of labor, investment, and procurement practices.

Policy Context and Development

South Africa is a nation of 49 million people, 90 percent of whom are black.¹ Unemployment in South Africa is high at 25.3 percent, with 50 percent of the South African population living at or below the poverty line, and government spending accounts for less than 30 percent of annual GDP.² In addition, one in four formal-sector employees works for the government or state-owned enterprises, and a substantial portion of the population is dependent on welfare. Three and a half centuries of British colonialism, white rule, and apartheid have created a racially divided economic system in which whites have higher incomes and stronger educational backgrounds than their black counterparts and are disproportionately represented in the leadership and ownership of South African companies and resources. Land appropriation and restrictions on black capital accumulation through legislation, job reservation, and lack of access to equal educational opportunities have given rise to a South African economy characterized by entrenched, racially based economic injustice, which the BBBEE attempts to address.³

BBBEE is an expansion and codification of the 1990s-era policy of the African National Congress (ANC) to promote black capitalism primarily through the transfer of corporate ownership.⁴ In practice, however, black economic empowerment's original focus on corporate ownership benefited only a small number of well-known and politically connected individuals, while the vast majority of blacks continued to be disadvantaged and corporate ownership remained mostly white.⁵ In addition, issues of transparency have stymied efforts to determine the true extent of black ownership, even for Johannesburg Stock Exchange (JSE)-listed companies. BBBEE seeks to move beyond the simple substitution of black owners and workers for white ones by restructuring economic institutions comprehensively and focusing on direct and indirect empowerment and human capital development.⁶ Although corporations are concerned about the prospect of black economic empowerment becoming too widespread, they have acknowledged its importance and, as the main drivers of economic growth, have had a considerable hand in shaping BBBEE.

It is important to understand the Act within the context of the ANC's ideological shift from socialism to economic liberalism, in addition to the country's economic and social realities.⁷ The evolution of black empowerment policy from the broad "people-based" 1994 Reconstruction and Development Program to the voluntary and market-based BBBEE in 2003 highlights the tension between the ANC's goals of economic redistribution and growth.

The creators of BBBEE did not specifically have investors in mind. The breadth and scope of the policy is wide and all-encompassing, and it is challenging to discern the implications for investors in South African businesses and products. Opportunities for impact investors to invest in companies or products that meet societal goals increase with this policy. More importantly, the policy also fundamentally reshapes the landscape for all investors.

Implementation

The Act gives the Ministry of Trade and Industry the ability to issue codes of good practice on black economic empowerment, and requires state institutions and public entities to take into account those codes when doing business with the private sector.⁸ BBBEE does not require the private sector to adhere to the codes, but it uses state actions to encourage compliance. Companies that do business with the government must be BBBEE-certified, and preferential procurement by companies from black-owned or BBBEE-compliant businesses is part of a company's BBBEE score. In theory, this process encourages all companies operating in South Africa to pursue BBBEE policies, creating a business imperative for the private sector in place of a legal requirement.⁹

Measurement of performance is based on a series of indicators that make up a BBBEE scorecard. Each indicator has a target, generally focused on spending rates and numbers of black owners and employees. Although the codes of good practice are applicable across all business sectors, some industries have developed and adopted their own transformation charters to promote the objectives of the Act. A notable example is the Financial Sector Charter, which evolved as the BBBEE legislation was being written. The

Charter sets out a series of indicators and targets for financial services companies in South Africa across human resources development, procurement policy, access to financial services, empowerment financing, ownership in the financial sector, shareholder activism, and corporate social investment.¹⁰ The Charter has had a direct and positive impact on investments in and financing for BBBEE-related services and industries, such as SMEs, low-income urban housing, and agriculture.

Impact

As BBBEE extends into all parts of the South African economy, it redirects existing investment capital and creates new impact investment opportunities. It creates opportunities to finance equity transfers to blacks to expand diversity and equality in corporate ownership, and supports the growth of black-owned businesses of all sizes through procurement. The publication of BBBEE scorecards help investors to identify companies that have positive social impacts, and companies with high scores are likely to benefit from preferential business agreements with the government. Further, individual industry transformation charters have their own collateral investment impacts, as the Financial Sector Charter does by focusing on increasing access to financial services in underserved and disadvantaged black communities.

Many companies in South Africa that do not rely on government contracts or licenses have not met BBBEE requirements because there is no impetus for them to do so.¹¹ Even those companies that have implemented BBBEE ownership initiatives do so for reasons other than to secure government contracts, including considerations that such efforts are important for South Africa's stability, present opportunities to grow and gain market share, are a business imperative, or because of other industry requirements or internal corporate commitment to BBBEE.¹² Blacks' lack of capital is also problematic for equity transfers; private funding finances many equity transactions, and debt financing can cause problems when there is a financial crisis, as seen in 1997.¹³

Despite over R200 billion (\$35.2 billion) in BBBEE equity transactions, BBBEE's success in drawing blacks into ownership roles and productive participation in the economy has been mixed. Although it is difficult to measure black ownership, estimates of the proportion of JSE-listed corporations owned by blacks range from 2 percent to 20 percent. Meanwhile, more than 75 percent of the private sector is not BBBEE-compliant.¹⁴ Unemployment and poverty levels remain high, and income disparity within the black population is widening as the wage gap between elite whites and blacks narrows.¹⁵ Most BBBEE deals have benefited a small group of well-connected elite blacks, and the centrality of the state in markets has led to concerns about cronyism and corruption.

Problems within the government bureaucracy have also impeded implementation. Lack of coordination among existing laws governing businesses and investments has made compliance additionally confusing and/or difficult. Efforts to build up BBBEE SMEs have suffered from bankruptcies caused by the government's inability to pay on time, in part because of inefficiencies but also because of the additional resources needed to make BBBEE calculations and wade through procurement regulations designed to crack down on corruption.

Financial services providers in South Africa are among the top BBBEE-compliant companies with the highest point scores. Research also suggests that there is a positive correlation between the BBBEE compliance of listed companies and profit growth.¹⁶ The broad reach of the policy makes it difficult to discern the specific ways it affects investment.

Future Directions

Critics of BBBEE have argued variously that the policy reinforces the racialization of the economy and prolongs social tension, promotes the growth of a tiny, wealthy, and politically connected black elite, has limited reach because it does not mandate compliance, and is detrimental to foreign investment. There is considerable concern about black "fronting," where blacks have ownership and management roles with little actual say or control. Even the question of how to measure the achievement of black economic empowerment is controversial: some claim that BBBEE's focus on percentages, head counts, and dollar

amounts creates “artificial demands to fill numerical quotas,” many of which are unachievable because of skills deficiencies resulting from apartheid-era policies.¹⁷

Research suggests that the government has paid too much attention to ownership and management requirements, at the expense of job creation, fighting poverty, and coordinating economic and social goals for the betterment of all South Africans. However, dismantling BBBEE would look like an abdication of black economic empowerment and would present serious political difficulties. The continued lack of compliance with BBBEE and failure of BBBEE successes to trickle down to the working class and poor South Africans have ensured that agitation to revise black economic empowerment legislation continues.¹⁸

Despite the policy’s imperfections, BBBEE has the potential to change the nature of corporate and community development investment in South Africa. By identifying companies with positive black economic empowerment activities, BBBEE increases the information available about corporate activities and allows investors to direct funds toward corporations with high social impact. Investors particularly concerned with issues of community development, economic injustice, access to financial services, or the growth of small and medium enterprises have the opportunity through BBBEE and related legislation to find significant impact investment opportunities in South Africa.

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- 1 Using the definition of black as given in the BBBEE Act. The breakdown by ethnicity is 79 percent black, 8.9 percent colored, and 2.5 percent Indian/Asian. CIA World Factbook, “South Africa,” <https://www.cia.gov/library/publications/the-world-factbook/geos/sf.html>
 - 2 Statistics South Africa, “Latest Key Indicators,” September 2010, www.statssa.gov.za/keyindicators/keyindicators.asp; Michael Appel, “Poverty in South Africa Is Declining,” October 2, 2008, www.southafrica.info/about/social/poverty-021008.htm; Heritage Foundation, “2010 Index of Economic Freedom: South Africa,” www.heritage.org/index/country/SouthAfrica
 - 3 Roger Southall, “The ANC and Black Capitalism in South Africa,” *Review of African Political Economy* 31, no. 100 (2004): 313-28.
 - 4 The ANC is South Africa’s ruling party, and has been in power since the fall of apartheid in 1994. Roger Tangri and Roger Southall, “The Politics of Black Economic Empowerment in South Africa,” *Journal of Southern African Studies* 34, no. 3 (2008): 699-716; Roger Southall, “Ten Propositions about Black Economic Empowerment in South Africa,” *Review of African Political Economy* 34, no. 111 (2007): 67-84.
 - 5 Elizabeth A. Hoffman, “A Wolf in Sheep’s Clothing: Discrimination Against the Majority Undermines Equality While Continuing to Benefit Few Under the Guise of Black Economic Empowerment,” *Syracuse Journal of International Law and Commerce* 36, no. 87 (2008): 87-115.
 - 6 Southall, “ANC and Black Capitalism,” 320; Vuyo Jack with Kyle Harris, *Broad Based BEE: The Complete Guide* (Northcliff, South Africa: Frontrunner, 2007), p. 26.
 - 7 Ralph Hamann, Ralph Sanjeev Khagram, and Shannon Rohan, “South Africa’s Charter Approach to Post-Apartheid Economic Transformation: Collaborative Governance or Hardball Bargaining?” *Journal of Southern African Studies* 34, no. 1 (2008): 21-37; Tangri and Southall, 700, 702.
 - 8 The 2007 codes of good practice are a separate extension of the BBBEE Act, and they contain the scorecard used to measure corporate black economic empowerment.
 - 9 Had the ANC pursued a more stringent legal route for the private sector, there would have undoubtedly been greater pushback from the South African business community, creating a significant political roadblock. Jack and Harris, 44-45.
 - 10 Moyo, Theresa and Shannon Rohan. “Corporate citizenship in the context of the financial services sector: what lessons from the Financial Sector Charter?” *Development Southern Africa*, 23:2, 2006, p. 289-303.
 - 11 Tangri and Southall, 707.
 - 12 Kurt Sartorius and Gerhard Botha, “Black Economic Empowerment Ownership Initiatives: A Johannesburg Stock Exchange Perspective,” *Development Southern Africa* 25, no. 4 (2008): 437-50.
 - 13 Southall, “Ten Propositions,” 76, 80-81; Jack and Harris, 382.
 - 14 Transaction totals as of 2008, in Esser, Irene-marie, and Adriette Dekker. “The Dynamics of Corporate Governance in South Africa: Broad Based Black Economic Empowerment and the Enhancement of Good Corporate Governance Principles.” *Journal of International Commercial Law and Technology*, 3:3, 2008, p. 157-169. Department of Trade and Industry, “Minister Davies Says BEE Compliance Is Low,” press release, April 6, 2010, www.dti.gov.za/mediareleases/b-bbee.pdf
 - 15 Mel Gray, “The Progress of Social Development in South Africa,” *International Journal of Social Welfare* 15, suppl.1 (2006): S53-62; Rulof Burger and Rachel Jafta, “Returns to Race: Labour Market Discrimination in Post-Apartheid South Africa” (working paper, University of Stellenbosch, 2006), 39-40.
 - 16 Empowerdex, “Empowerdex Top Empowerment Companies 2010,” www.empowerdex.co.za/RESEARCH/TopBEECompanies/tabid/193/Default.aspx
 - 17 Southall, “Ten Propositions,” 67; Hoffman, 96.
 - 18 Tangri and Southall, 714.

CASE STUDY 11:

Microfinance Act



GEOGRAPHY	Kenya
POLICY TYPE	Regulation
POLICY MEANS	Supply Development

DESCRIPTION

Establishes regulatory oversight and capital adequacy requirements for deposit-taking microfinance institutions

LESSONS FOR THE FIELD

- **Coordination:** Regulation alone is insufficient to improve the performance and management of MFIs; enforcement and supervision, together with strong industry infrastructure, technical assistance, and learning networks are critical.
- **Targeting:** Regulation of MFIs must accommodate the idiosyncrasies of microfinance activities with respect to cost structure, client base, portfolio composition, and governance.
- **Commitment:** In the presence of political instability and economic uncertainty, government may be unable to provide the resources necessary to support regulation and growth of microfinance.

IN BRIEF

The Microfinance Act authorizes the Central Bank of Kenya to license, regulate, and supervise the activities of formally constituted deposit-taking microfinance institutions in Kenya. The Act itself simply empowers the Central Bank as regulator, but specific rules subsequently released by the bank serve to govern microfinance activity in practice. In particular, the Bank has imposed core capital requirements designed to ensure adequate liquidity of depository MFIs, and established minimum corporate governance standards and ownership limits.

The regulations have had little discernable effect to date on the sector's performance, although data from other countries in Africa suggest that asset quality and liquidity of regulated MFIs is better than in unregulated ones. Kenya's experience will likely evolve with time, stronger oversight and enforcement, and the growth of depository MFIs.

Political Context and Development

Kenyan society remains characterized by sharp income disparities and widespread poverty.¹ A great majority (75 percent) of the labor force is employed in informal and subsistence agriculture, although the tourism and telecom sectors have been important engines of growth in recent years. An ethnically diverse population heightens the socioeconomic tension; more than 40 different languages are spoken in Kenya, and tribal affiliation plays a major role in politics.

The majority of Kenya's population (87 percent) uses no formal financial services, but instead relies on cooperative lending societies and other forms of informal savings and credit.² The size of the informal financial sector in Kenya suggests a significant opportunity to extend formal financial services to many of those currently excluded from the financial mainstream. At the same time, subjecting Kenya's microfinance sector to the same prudential regulations as commercial banks may limit its ability to serve low-income, marginalized segments of the market.³

The move to regulate deposit-taking MFIs came at the same time as many other economic and financial reforms designed to build confidence in Kenya's financial sector, as well as more sweeping constitutional changes. The motivation for microfinance-specific regulation was twofold: first, to ensure that MFIs, whose operational requirements are unique among financial institutions, were not overburdened by traditional prudential regulation and thus unable to meet the financial needs of the poor. Balanced against the consideration of institutional structure was the need to protect depositors and the public from the risk of abuse and failure.

Prior to the passage of comprehensive legislation concerning the microfinance sector, no fewer than eight separate statutes governed MFIs in Kenya, many of which failed to adequately address issues of governance, ownership, and accountability critical to the performance of financial institutions.⁴ Critics blame the lack of regulatory oversight for the poor performance and failure of many Kenyan MFIs, and view it as a constraint on the ability of the sector as a whole to access private capital.

Meanwhile, the conversion of the Kenya Rural Enterprise Program (K-Rep) to a private bank in 1999 (see inset) marked the first time an MFI came within the supervision of Kenya's Central Bank. Regulators faced important questions about whether the country's regulatory framework for commercial banks was appropriate for MFIs, whose core activities, client base, lending practices, cost structure, and portfolio composition differed in critical ways from traditional financial institutions.⁵ For instance, they saw the requirement that traditional banks maintain capital at least equal to 7.5 percent of risk-weighted assets as insufficient insurance against the high-risk and potentially volatile portfolios of microfinance institutions, and the Central Bank's rules for MFIs were designed to ensure proper management of additional capital risk.

POLICY IN ACTION:

K-Rep Bank

Before the passage of the Microfinance Act, K-Rep, one of the largest MFIs in Kenya and a non-governmental organization, was under pressure by banking regulators to improve its financial position by moving up-market, adopting traditional lending practices that would exclude its riskiest clients and threaten its mission to serve the poor.

In 1999, K-Rep established K-Rep Bank, a for-profit microfinance bank subject to the regulatory requirements of the banking sector; however, it continued to work with regulators and policymakers to establish a regulatory framework appropriate to the activities and mission of microfinance institutions. K-Rep remains a significant player in the microfinance field in Kenya, and its shareholders include ShoreCap International and Triodos Bank.

Implementation

Kenya's microfinance sector consists of approximately 250 MFIs, 38 of which practice only microfinance. Of those 38, 36 offer credit-only services (nondepository), whereas only two are deposit-taking institutions. The remaining institutions are unregulated by the Central Bank and offer microfinance services in combination with other social services.⁶

Even with few institutions falling under the scope of regulation, the Central Bank faces significant barriers to implementation.⁷ Performance evaluation and enforcement have arisen as key challenges. Although there is no dispute over the need to increase financial access for the poor through appropriate regulation of financial institutions, the government has struggled, in the midst of uncertainty, to marshal the resources necessary to both enforce existing standards and create new ones that cover a wider range of microfinance activities and improve the overall operational capacity of the sector.

Impact

When regulators set minimum capital requirements for MFIs, they strike a theoretical balance between promoting the proliferation of new institutions through low capital requirements, and concentrating regulatory resources on the thorough supervision of fewer institutions through higher capital requirements. Because Kenya's Microfinance Act applies only to depository MFIs, this tradeoff was not a significant

concern: only two large institutions came within the scope of the Act, and these were already operating well above the required minimum standards for capital adequacy and asset quality. To the extent that the Act implemented new reporting requirements and enforcement procedures, the internal controls and processes of these institutions have nevertheless been strengthened. As of late 2009, 30 more institutions had passed the first stage of approval to become licensed MFIs.

Size of Kenyan Microfinance Sector 2010			
MFI TYPE	REGISTERED MFIs	GROSS LOAN PORTFOLIO (\$US Millions)	% TOTAL LENDING
Commercial Banks (regulated separately)	3	688	25
Licensed MFIs	2	128	5
Retail MFIs	36	443	16
Savings and Credit Cooperatives (unregulated)	5,000	1,500	54

Source: MIXMarket

Indeed, microfinance in Kenya continues to grow; the 36 retail MFIs registered with Kenya's Association of Microfinance Institutions (AMFI) reported a 33 percent increase in total value of deposits, from \$151 million to \$202 million in 2008, while the lending client base increased 30 percent. At the same time, the poor financial performance of Kenyan MFIs since 2007 reflects deeper challenges that extend beyond the scope of regulatory policy. Portfolio risk has increased as a result of political and economic instability, and asset returns lag behind comparable institutions in the sub-Saharan region.

Although it is difficult to disentangle the effect of regulatory supervision from other, more ubiquitous market forces on the performance of Kenyan MFIs, data from other countries offer some evidence of positive effect. Uganda's experience with regulation of microfinance depository institutions (MDIs) suggests that asset quality of regulated MDIs, particularly with respect to portfolio at risk shares, improved steadily in the years following regulation, and that capital adequacy ratios have remained well above minimum standards.⁸

Maximum shareholder requirements in Uganda led to improved governance, positive perceptions of management, and, ultimately, higher capitalization levels. An empirical study of the performance of regulated microfinance institutions indicates that, although regulation itself is not likely to contribute directly to improved performance, regulated institutions achieve better client outreach than their nondepository counterparts to the extent that regulation enables MFIs to accept deposits.⁹

Future Directions

There is still a considerable gap in access to formal financial services for poor and rural Kenyans. Approximately 35 percent of those considered “included” in the financial sector use informal and semiformal institutions and services such as rotating savings and credit pools. Regulation of MFIs, depository and otherwise, is only one piece of a much broader effort to strengthen the economy and achieve the goals of financial inclusion and shared prosperity.

A recent report from Kenya’s microfinance trade association concluded that government must strengthen the capacity of the relevant regulatory bodies to supervise the industry, enforce regulations, and improve transparency and operational capacity in the microfinance sector as a whole.¹⁰ Despite the core financial and governance standards set forth in the 2006 Microfinance Act, significant variation in management, performance, and service capacity remains among MFIs in Kenya. There is an important role for donors, investors, industry groups, and government in strengthening the capacity and sustainability of the sector through broad adoption of industry best practices, improved operations and financial accounting standards, better transparency, and sector-wide facilitation of learning and leadership. Improving performance on all these dimensions will enable established MFIs to access external financing and begin to close the capital gap that constrains the microfinance sector.

The central government has prioritized expanded access to financial services as part of its effort to modernize the economy, but ongoing political instability following the disputed 2007 election has constrained not only the government, but the financial sector as a whole. Bringing microfinance institutions into the regulatory mainstream represented an important step toward securing the future expansion of the sector. For the moment, political and economic instability, exacerbated by the global economic recession, appear to be the most significant challenges to microfinance growth.

¹ National Bureau of Statistics, “2008 Economic Survey of Kenya” (Nairobi: 2008).

² Financial Sector Deepening (FSD) Kenya, “Financial Exclusion in Kenya” (Nairobi: 2008).

³ Robert Peck Christen, Timothy Lyman, and Richard Rosenberg, “Microfinance Consensus Guidelines: Guiding Principles on Regulation and Supervision of Microfinance” (Washington, DC: CGAP/The World Bank Group, 2003).

⁴ George Omino, “Regulation and Supervision of Microfinance Institutions in Kenya” (College Park: IRIS Center, University of Maryland, 2005).

⁵ Jay Rosengard, “Microfinance Development in Kenya: K-Rep’s Transition from NGO to Diversified Holding Company and Commercial Bank” (Development Discussion Paper No. 762, Cambridge, MA, Harvard University, Kennedy School of Government, June, 2000).

⁶ MIXMarket, “Microfinance in Kenya: Country Briefing” (Washington, DC: July 2010), www.mixmarket.org/mfi/country/Kenya/report

⁷ Association of Microfinance Institutions (AMFI) Kenya, “Executive Summary: Report on the Supply of Financial Services by the Microfinance Sector” (Nairobi: September 2009).

⁸ Justine Bagyenda (Executive Director, Bank of Uganda), “Microfinance Regulation—Who Benefits? Uganda’s Experience in Regulation Deposit-Taking Microfinance Institutions” (presentation at the International Conference on Microfinance Regulation, Dhaka, Bangladesh, March 2010).

⁹ Valentina Hataraska and Denis Nadolnyak, “Do Regulated Microfinance Institutions Achieve Sustainability and Outreach? Cross-Country Evidence,” *Applied Economics* 39, no. 10 (2007): 1207-22.

¹⁰ AMFI Kenya, “Executive Summary.”

Works consulted:

Joanna Ledgerwood and Victoria White, “Transforming Microfinance Institutions: Providing Full Financial Services to the Poor” (Washington, DC: World Bank Publications, 2006).

CASE STUDY 12:

Priority Sector Lending



GEOGRAPHY	India
POLICY TYPE	Regulation
POLICY MEANS	Supply Development

DESCRIPTION

Regulation requiring a fixed percentage of lending in underserved and target markets

LESSONS FOR THE FIELD

- **Targeting:** Performance standards designed to correct underinvestment need to be carefully targeted to ensure the greatest impact. A system of tradable permits may help financial institutions achieve performance goals at lower cost.
- **Coordination:** One way to strengthen investment mandates is through policy infrastructure that facilitates collaboration among market players, like mainstream banks and financial intermediaries that specialize in serving poor and rural borrowers.

IN BRIEF

For more than four decades, the Reserve Bank of India (RBI) has required all public and private banks to direct a fixed percentage of lending to “priority sectors,” which it defines as underserved or priority areas for economic growth.

Today, state-owned and private banks must make 40 percent of all loans to the priority sector, whereas foreign banks have a minimum requirement of 32 percent. The priority sector includes agriculture, small enterprise, retail trade, education, and housing finance. The RBI decreed in 1998 that one-fifth of priority sector lending must go to “weaker section” small business and agricultural borrowers.

A proposed scheme of tradable Priority Sector Lending Certificates (PSLCs) has recently emerged as a potential strategy to improve efficiency and inclusion of the poor in the priority sector. If this scheme is implemented, banks will purchase low-risk PSLCs in fulfillment of their lending requirements, largely from microfinance institutions. PSLCs have the potential to increase the role of MFIs is providing more efficient and lower cost services to India’s poor urban and rural borrowers.

Policy Context and Development

India's priority sector lending (PSL) requirements are part of a policy effort by the RBI to allocate credit toward marginal and higher risk sectors. The regulations have two main objectives: first, to channel resources to areas that are deemed national priorities; and second, to foster inclusion of the poor in India's economic growth.

India's large, predominantly rural agricultural sector accounts for approximately 17 percent of total GDP and 60 percent of aggregate employment. Micro- and small enterprises play a significant role in the country's economy, accounting for 8 percent of GDP and nearly 40 percent of manufactured output.¹ Fully 94 percent of India's small businesses are part of the informal economy, where capital is more easily accessible but decidedly more expensive.²

India's banking sector is predominantly state-owned and heavily regulated.³ Sophisticated equity markets in cities stand in stark contrast to a traditional informal lending sector that figures prominently in the lives of ordinary citizens, despite the prevalence of bank branches and infrastructure.

The RBI has attempted to balance India's development and inclusion priorities with the profitability of the financial sector. In the 1990s, the RBI gradually broadened the definition of PSL to reduce the burden of compliance on banks. These changes increased the pool of potentially profitable loans, diverting capital from opportunities for social impact. Subquotas added in 1998 encouraged lending to small business and agriculture.

POLICY IN ACTION:

National Bank for Agriculture and Rural Development (NABARD)

Among the investments that fulfill bank priority sector lending obligations is the purchase of bonds issued by NABARD, a state-run bank with a mandate for promoting the development of rural agriculture, infrastructure, and small-scale industry. In 2009, the bank raised \$4.6 million in bond financing, much of which qualified as a priority sector investment for private banks operating in India.

Implementation

Priority sector regulation corrects under-lending to the most vulnerable sectors of India's economy, particularly agriculture and small business, where access to capital has the potential to increase productivity and spur economic development.⁴ As part of the nationalization of the banking sector in 1969, the regulations made credit available to agriculture and small industry at the same time that a surge in branch expansion made access to banking a reality for rural populations.⁵ Regular updates to the scheme over the past four decades have aimed to lower administrative costs for banks, although often at the expense of those with the least access to capital. For example, broadening the definition of "priority sector" lowered compliance costs for banks but enabled them to further exclude small, higher risk borrowers by directing capital to the most profitable borrowers.

Portfolio sales and securitization of priority sector loan products, particularly from microfinance institutions, emerged as a common practice as the prevalence of microfinance grew. Banks with PSL mandates would purchase priority sector loan portfolios from development or microfinance institutions. Critics believed this to be problematic because it was leading to the transfer of high-risk assets and the decoupling of lending decisions and repayment performance.

In 2009, the Rajan Commission on Financial Reform proposed PSLCs as a way to balance the tension between profitability for banks and the inclusion of India's poorest in the financial system. Lenders like MFIs could issue PSLCs, and banks could purchase them to fulfill regulatory requirements.

Such a system would enable microfinance institutions and other nontraditional lenders to leverage significant cost advantages over banks in serving poor urban and rural borrowers and increase the flow of capital to underserved sectors. PSLCs aim to solve the problems of portfolio sales by allowing banks to purchase standardized, tradable credits for loans made by nontraditional financial institutions, while the assets remain on the books of the original lender.

Impact

PSL has increased the flow of capital to priority sectors relative to the unregulated market, although the extent to which this translates into economic opportunity for India's small, second-tier borrowers is unclear. Between 42 and 45 percent of total bank credit is directed to priority sectors, and approximately 20 percent of that fraction is required to be reserved for the weaker section.

Priority Sector Advances of Public and Private Banks 2009

SECTOR	RUPEES CRORE (10M)	% TOTAL
Agriculture	677,270	56
Small Enterprise	239,223	20
Retail Trade	50,386	4
Microcredit	8,555	1
Education	20,545	2
Housing Finance	210,053	17
TOTAL	1,206,032	100

Source: MIXMarket

As the table shows, lending to the agriculture sector constitutes more than half of the total volume of PSL in India. Lending to the microcredit sector is relatively small. The share of asset-backed securities originated by nonbank financial companies (NBFCs) in India-including MFIs registered as NBFCs-grew almost 50 percent, driven largely by demand for priority sector loans.⁶ Separately registered MFIs continue to make up a smaller share of the market.

Some critics have argued that although PSL played a significant role in the growth of India's large microfinance sector, it is no longer necessary to preserve liquidity in a sector that is now

largely financed by market-rate capital. However, in combination with narrowly defined priority sector targets, PSLCs might be capable of fulfilling unmet demand for capital among the riskiest, highest cost borrowers, and improving efficiency by identifying lenders with the lowest cost of service.⁷

A successful PSLC scheme could increase the size and scope of the MFI sector, diverting a significant amount of capital to the weaker section through MFIs and rural lending cooperatives. The details of implementation and policy coordination may prove to be crucial determinants of the system's success. For instance, in the context of a broadly defined priority sector, PSLCs would first encourage lending to the most profitable borrowers, and those with the least risk. Furthermore, such a system would favor the largest and most efficient MFIs over smaller, locally specialized institutions, and may ultimately fail to resolve the problem of inclusion.

Future Directions

A number of factors continues to limit the overall impact of India's PSL regulations. First, the definition of the priority sector includes many larger borrowers that are not credit constrained. This is partly a result of tremendous political pressure to preserve the status quo. Second, although the RBI recently removed interest rate caps on smaller loans, it remains to be seen whether this will increase liquidity for small, higher risk borrowers.⁸

Even in the presence of priority sector norms, formal financial institutions fail to serve 94 percent of the rural and urban poor. Allowing microfinance institutions and other established, registered lenders to sell PSLCs may be an important step toward lowering the cost of providing credit. PSLCs, if implemented, may

become an important policy innovation because MFIs have solved some of the problems of high fixed costs of information, monitoring, and collection that make lending in underserved areas so expensive for banks,⁹ making them better equipped to serve the poor.

¹ Annual Report 2009-10. Ministry of Micro, Small and Medium Enterprises. (New Delhi, India 2010).

² Abhijit Banerjee and Esther Duflo, "Do Firms Want to Borrow More? Testing Credit Constraints Using a Directed Lending Program" (working paper no. 005, Bureau for Research and Economic Analysis of Development, Duke University, Durham, NC, 2004).

³ Currently, 66 percent of banks are public, and state-owned banks control 70 percent of assets in the sector. Public banks are permitted to lend only 20 percent of available funds at market rates; the remainder must be given at RBI-determined rates.

⁴ Christopher Woodruff, David McKenzie, and Suresh DeMel, "Returns to Capital in Microenterprises: Evidence from a Field Experiment" (Policy Research Working Paper no. 4230, World Bank, Washington, DC, 2007).

See also Banerjee and Duflo, "Do Firms Want to Borrow More?"

⁵ Kusum Ketkar, "Public Sector Banking, Efficiency, and Economic Growth in India," *World Development* 21, no. 10 (1993): 1685-97.

⁶ CARERatings, "Retail Asset Securitization Market in FY10: Overview" (Mumbai: April 2010), <http://www.careratings.com/current/3/7356.pdf>

⁷ Government of India Planning Commission, "A Hundred Small Steps: Report of the Committee on Financial Sector Reforms" (New Delhi: 2009).

⁸ Abhijit Banerjee and Esther Duflo, "Giving Credit Where It Is Due" (working paper no. 10-3, MIT Department of Economics, Cambridge, MA, 2010).

⁹ Xavire Gine, Pamela Jakiela, Dean Karlan, and Jonathan Morduch, "Microfinance Games" (discussion paper no. 936, Economic Growth Center, Yale University, New Haven, CT, 2006).

CASE STUDY 13:

National High-Tech R&D (863) Program



GEOGRAPHY	China
POLICY TYPE	Public Investment
POLICY MEANS	Demand Development

DESCRIPTION

Promotes innovation through public investment in high-technology research and development in renewable energy and other areas

LESSONS FOR THE FIELD

- **Targeting:** Although not explicitly meant to create an impact investing market, industrial policy aimed at advancing innovation in renewable and clean energy technology may have a direct effect on impact investing opportunities.
- **Commitment:** Carbon emissions reduction targets and climate change goals can play a critical role in ensuring investor confidence in renewable energy markets, particularly when they are reinforced by energy security needs.

IN BRIEF

China's National High-Tech Research and Development Program, also known as the 863 Program, emerged in 1986 as a response to the growing technological and innovation gap between China and the West. It originally established a government fund to invest in strategic technology research and development initiatives through the country's extensive system of state-sponsored research institutes.

The main objectives of the 863 Program are to fund technological research and innovation in areas of strategic importance to the nation's economic and social development. In recent years, priorities for 863 have included the development of key technologies in information infrastructure; biological, agricultural and pharmaceutical sectors; new materials and advanced manufacturing technologies; and environmental protection, resources, and energy development. The program has strongly emphasized energy research in particular because of its strategic importance to national security; its implications for climate change, environmental sustainability, and public health; and its potential to attract significant offshore investment capital and accelerate sustainable economic growth.

Policy Context and Development

The 863 Program was part of a larger series of economic reforms that characterized China's transition from a socialist command economy to one that embraces elements of market competition.¹ Chinese leaders acknowledged that broad reforms would be necessary in order to achieve the rapid economic growth, technological innovation, and critical updates to the country's infrastructure that would improve the quality of life of China's citizens. Instrumental to all three objectives would be a move from a heavily militarized, state-controlled scientific establishment toward one characterized by greater civilian presence, increased private investment, and clearer paths to the market.

Public investment in high-tech research through 863 and other programs program is embedded in the complex and evolving institutional landscape of China's high-technology sector, which includes a number of high-level government agencies, hundreds of state-run research institutes, and public R&D investment funds to capitalize the sector, as well as a growing number of private sector firms in the R&D establishment.

China has sought to attract foreign investors through tax incentives and co-investment in research, and has succeeded in diversifying the functions of hundreds of state-controlled public research institutes, giving them greater autonomy over operations and connections with industry.² It launched programs to provide small amounts of equity capital for emerging technologies from R&D institutes and universities, which in turn signaled readiness for commercialization to banks and venture capital funds.³

Energy policy has played an important role in attracting capital to China's rapidly growing renewable energy sector. Significant carbon emissions reduction targets and renewable portfolio mandates for utilities, combined with local and regional government initiatives to curb emissions, have helped ensure widespread adoption of renewable technologies.⁴ The credibility of China's commitment stems largely from the fact that its energy policy is closely linked to national security, and is reinforced by major investments in energy infrastructure, grid improvements, and renewable technology that have increased China's capacity to absorb and deploy renewable technologies.

The 863 Program is part of China's gradual re-orientation toward international trade and openness to foreign investment following the accession to power of Deng Xiaoping in 1978.⁵ Before 1985, research and development had been centralized in state-controlled public research institutes (PRIs), not universities or private sector firms, and China viewed technology as a free public good. With weak incentives for researchers to develop commercial applications of new technologies and virtually no framework for establishing or protecting intellectual property, neither private investment nor innovation played a significant role in China's high-tech industry. By strengthening patent law, establishing rules for technology transfer from foreign firms seeking to manufacture their products in China, and funding high-tech R&D through the 863 Program, China has attempted to create a semi-private market for investment in innovation that can attract foreign and domestic capital to renewable and clean technologies.

POLICY IN ACTION:

Xinjiang Goldwind

Xinjiang Goldwind Science & Technology Company is the largest wind turbine manufacturer in China. It started its R&D operation through the 863 Program in 1998, taking on the program's goal of developing China's first 600kW-generating set. Goldwind subsequently received three National Science and Technology Projects and has enjoyed tax incentives and infrastructure investments from local government. It has since acquired independent R&D capacity and patented a 1.5MW turbine model, which has been licensed for use on German wind farms. Goldwind went public on the Shenzhen stock exchange in 2007.

Beginning in 2001, the government initiated a focus on renewable energy and storage technology as a critical step toward energy independence and industrial growth, and began to direct significant public funding to research, product development, and application of technologies in the renewables sector. The program has led to rapid technological development and expansion in the wind, solar, nuclear, and hydroelectric industries. In conjunction with China's aggressive emissions reduction targets, it has fueled major investments in domestic infrastructure and deployment.

Implementation

At its core, the 863 Program channels government investment capital to high-tech research and technology development through a system of research grants and contracts. Public research institutes account for 37 percent of expenditures under the program, universities for 43 percent, and private enterprise for 12 percent.⁶

The Ministry of Science and Technology (MOST) is the principal agency with responsibility for developing science and technology strategy, policy, and regulation, and for coordinating other government agencies and advisory bodies involved in implementation. The Chinese Academy of Sciences (CAS) presides over academic institutions and research organs and houses more than 125 state-controlled research institutes, which receive the majority of direct funding issued through the 863 Program. The Natural Science Foundation Committee is the advisory body responsible for allocating research funds to basic and applied projects. The Academy of Engineering (CAE) plays a key role in international collaboration and bridging the academic and industrial engineering communities.

China's 11th (current) five-year plan for the science and technology sector emphasizes indigenous innovation, international cooperation, commercialization, and further institutional reform. Funding for high-tech R&D has increased to reflect this focus: public expenditure on 863 increased more than twelvefold between 1996 and 2005.⁷

Impact

Over the past five years, China has spent approximately 1.5 percent of its total GDP (\$141 billion) on R&D (compared to 2.8 percent in the US and 3.4 percent in Japan), and is expected to outspend Japan by mid-2010.⁸

Government initiatives make up nearly 70 percent of R&D spending in China, which accounts for approximately 4 percent of total public spending. In 2008, the combined budget for the 863 and 973 (Key Technologies) R&D Programs was approximately \$585 million.⁹

Most observers agree that the 863 Program has played a key role in China's recent technological and industrial development, although it is difficult to quantify the direct return on high-tech R&D spending in terms of increased productive capacity.

China's key strength in high-tech R&D has been its ability to absorb and improve on existing technologies, leveraging quick-response manufacturing capabilities to develop commercial applications and bring products to market. There have been a number of notable

commercial successes in the renewables sector at least partially attributable to the 863 Program; for instance, China has become the leading manufacturer of wind turbines for domestic use, and have recently begun to expand their export capacity.¹⁰ China is also the world's largest producer and consumer of solar-powered water heaters.¹¹

**863 Program Energy Focus
11th Five-Year Plan 2006-2010**

SECTOR	FUNDING (Million RMB/Year)	% TOTAL
Hydrogen/Fuel Cell Technology	75	33
Energy Efficiency Technology	75	33
Clean Coal Technology	45	20
Renewable Energy Technology	29	13
TOTAL	224	100

Source: China Ministry of Science and Technology

Nevertheless, although private investment in R&D has been growing,¹² there are doubts about whether China's technology transfer policy is an efficient way to catalyze investment in renewable energy. The country's recent focus on innovation comes alongside traditional "cooperation" programs, which require foreign companies to cooperate with Chinese firms in exchange for market access. The requirement ensures that domestic firms remain competitive with foreign ones, but has limited foreign expansion into Chinese markets.

Future Directions

The primary strength of China's R&D policy may also be its greatest weakness. On the one hand, government-led industrial development has achieved considerable success in advancing domestic production of renewable energy and has ensured a strong and growing domestic market for clean technologies. Yet this same top-down approach has constrained the role of private companies, particularly foreign firms, in the market and has created obstacles to innovation that the state continues to try to overcome.

China's reliance on technology transfer as the foundation of high-tech industrial development means that, although Chinese companies have strong prospects for growth, foreign companies seeking access to Chinese markets are at a significant disadvantage. Furthermore, weak intellectual property rights protection and enforcement lowers investor incentives for financing indigenous innovation; currently, only 24 percent of Chinese firms have R&D facilities, and China has comparatively low R&D intensity by Organisation for Economic Co-operation and Development (OECD) standards.¹³ Increased innovation and export capacity in clean energy will require greater participation by the private sector in China's R&D system.

There are clear opportunities for China to improve the institutional infrastructure that shapes relations among research institutes, universities, and industry. The nation has made some progress in strengthening the role of the private sector in innovation through investments in high-tech development zones, improved human resource management, and government subsidized and guaranteed loans for firms engaged in priority R&D activities.

1 Federal Research Division, Library of Congress, *China: A Country Study* (Washington, DC: 1988), <http://lcweb2.loc.gov/frd/cs/cntoc.html>

2 Steven White, Jian Gao, and Wei Zhang, "China's Venture Capital Industry: Institutional Trajectories and System Structure," presented at the International Conference on Financial Systems, European Commission-DG Research, Brussels, November 2002.

3 Ibid.

4 Fu Jing and Xie Songxin, "Green Energy Program Drafted," *China Daily*, March 3, 2010, www.chinadaily.com.cn/china/2010-03/02/content_9521579.htm

5 White, Gao, and Zhang.

6 UN PSI country profile: China.

7 Can Huang, Celeste Amorim, Mark Spinoglio, Borges Gouvias, and Augusto Medina, "Organization, Programme, and Structure: An Analysis of the Chinese Innovation Policy Framework," *R&D Management* 34, no. 4 (2004): 367-87.

8 Martin Grueber, "Emerging Economies Drive Global R&D Growth," *R&D*, December 22, 2009, www.rdmag.com/Featured-Articles/2009/12/Policy-And-Industry-Global-Funding-Report-Emerging-Economies-Drive-Global-R-D-Growth.

9 Xiaomei Tan, "Clean Technology R&D and Innovation in Emerging Countries: Experience from China," *Energy Policy* 38 (2010): 2916-26.

10 Grueber.

11 The Climate Group, "China's Clean Revolution II: Opportunities for a Low-Carbon Future" (London: 2009), www.theclimategroup.org/publications/2009/8/20/chinas-clean-revolution-ii-opportunities-for-a-low-carbon-future

12 Organisation for Economic Co-operation and Development, "OECD Reviews of Innovation Policy: China" (Paris: 2008), www.oecd.org/sti/innovation/reviews/china

13 Ibid.

CASE STUDY 14:

Tokyo Cap and Trade Program



GEOGRAPHY	Japan
POLICY TYPE	Regulation
POLICY MEANS	Directing Capital

DESCRIPTION

Sets a cap on large-building carbon emissions in Tokyo, and designs a trading system and guidelines for emission reduction

LESSONS FOR THE FIELD

- **Implementation:** The Tokyo Metropolitan Government built its cap and trade program on the lessons of a previous carbon emissions program, which failed to achieve its goals because it relied on voluntary emissions cuts. Recognizing this shortfall, Tokyo designed the program to be mandatory, thus improving its chances of success.
- **Transparency:** The original program had a successful mandatory reporting strategy that allowed the Tokyo Metropolitan Government to set a fair baseline emissions standard for buildings.

IN BRIEF

The Tokyo Metropolitan Government (TMG) has undertaken a campaign to significantly reduce carbon emissions in the Japanese capital through a 10-year, multisector climate change strategy that involves a number of regulatory, coordinating, educational, and private-sector strategies. The target goal of the TMG's climate plan is a 25 percent reduction in the city's baseline 2000 carbon emissions by 2020.¹

As part of this larger municipal climate change strategy, the TMG introduced a municipal cap and trade system focusing on end users of energy, particularly large commercial (and industrial) buildings, within the metropolitan region. The program, which was enacted in 2008 and came into effect in 2010, places a hard and progressively lowered ceiling on emissions from large-scale facilities in the metropolitan area.

Beyond the immediate goals of emissions reductions via greater efficiency in the built environment, the program is meant to catalyze and link to other regional emissions-trading initiatives in Japan, to support the development of a national plan and Japanese participation in global emissions markets, and to provide leadership and best practices in leveraging cap and trade policies for significant, verifiable emissions reductions.²

Policy Context and Development

Tokyo is one of the world's largest metropolitan areas, and the city emits approximately as much carbon-equivalent emissions as Sweden or Norway. It is by far the largest sub-national government emitter in Japan, and as the central hub of business and government activity has an outsized influence in discussions over national environmental policies. In response to this particular role, the TMG introduced in 2007 its 10-year climate change strategy in an effort to exert leadership within broader national and international efforts to reduce carbon emissions, declaring climate change an imminent threat to the city.

The larger climate change strategy included a focus on targeting large commercial buildings, defined as those using the equivalent of 1,500 kiloliters of oil annually. The TMG chose large buildings because they were major and growing emitters (accounting for approximately 40 percent of the city's overall emissions from industrial and commercial sectors), their size and the scale of operations of their owners meant they should have the resources to achieve emissions reduction targets, and as concentrated sources of emissions they would be relatively easier to monitor. The TMG identified these buildings as significant end users of energy that could help develop best practices for downstream emissions reduction strategies, a parallel effort to upstream efforts to produce energy either more efficiently or from renewable sources.³

The Tokyo Cap and Trade Program enacted in 2008 was an outgrowth of the Tokyo CO₂ Emissions Reduction Program begun in 2002.⁴ That voluntary program began the targeting of large commercial buildings, eventually leading in 2005 to more robust efforts at technical education, public praise for high-performing buildings and organizations, and a requirement that affected businesses submit progress reports that measured their emissions and announced their reduction strategies. (The Tokyo Green Building Program, which set reporting requirements on energy efficiency programs for new construction of and renovations in large buildings, complemented this program.)⁵ Despite these efforts and some limited success, the Emissions Reduction Program failed to meet its targets for emissions reductions.

The cap and trade program—the first regional program to target commercial buildings—was built on the lessons of its predecessor. A hard, mandatory cap replaced the voluntary reductions programs, and the program included attendant infrastructure for carbon trading, the purchase of carbon offsets, and verification of actual building emissions. Key to the development of the program was the information tracking carbon emissions gathered under the previous voluntary program. This gave the TMG a robust set of data from which to set the overall cap on carbon emissions, and to allocate carbon allowances in a fair way that might ensure concrete reductions in carbon emissions and reduce the potential to game the system.

Implementation

Cap and trade systems can be notoriously complex in design, and the downstream focus on commercial buildings create particular design challenges for the TMG's program. Key features for its implementation include a reliable baseline to set the cap, quality building-specific data to apportion emissions allowance, aggressive and achievable targets for reductions, manageable systems for verified carbon offsets, an exchange for trading emissions, and appropriate penalties for noncompliance.

These features are meant to create a system flexible enough to allow for innovation and changing circumstances in following the new regulations, but concrete enough to ensure substantial carbon reductions. In practice these translate into:

- A three-year emissions average for large buildings based on previous data collection, to set the baseline and allocate emissions allowances, with a reserve fund of allowances to support the entrance of new construction into the system;
- An offset program, which companies can use to support up to one-third of their emissions reduction targets. These offsets are limited to domestic projects, including verified offsets in buildings smaller than those covered in the program, renewable energy certificates, and credits for energy efficiency improvements in buildings outside Tokyo with the same owner. Companies are allowed to bank excess reductions to smooth out volatility in energy use, but they may not use potential future reductions to justify emissions increases; and
- Two five-year cycles setting emissions reduction mandates. The first cycle, from 2010 to 2014, requires a 6 percent reduction in energy use; the second, from 2015 to 2019, requires a further 17 percent reduction in energy use, on the theory that efficiencies in the marketplace and innovations in technology and management practices will accelerate energy efficiency gains. Companies are penalized for noncompliance at the end of each cycle.

A key goal of the cap and trade program is to influence broader Japanese efforts at emissions reduction. Thus, although the program itself is bounded by the Tokyo metropolitan region, a measure of its success from the TMG's perspective will be the development of parallel regional efforts in Japan and an expanded market for emissions trading beyond Tokyo.

Impact

The Tokyo cap and trade program was only formally put into place in April 2010, and it is far too soon to determine its impact. The most important milestone will be the results of the first five-year cycle at the end of 2014. The first emissions trading on the Japan Climate Exchange did take place in August 2010, with carbon emission tons trading at the high price of \$142, compared to \$20.62 on the European Climate Exchange. The high price was attributed to a lack of liquidity in the market and the relative expense of energy efficiency improvements in Japan, which already operates at a high rate of efficiency.⁶

From the perspective of impact investing specifically, key results will be the emergence and robustness of emissions-trading schemes, and the energy efficiency investment opportunities driven by the progressively lowered ceiling on emissions. The development of specific impact investing opportunities, such as those requiring capital from third parties, will depend on how companies choose to undertake their efficiency improvements and the extent to which they rely on offsets.

Future Directions

The role of emissions trading in reducing carbon emissions remains to some extent controversial, and the extent to which economic efficiency instead of political considerations plays in the advocacy for cap and trade policies is unclear. Regional programs offer particular challenges, and the TMG's downstream focus on commercial buildings, at least in theory, has the potential to disincentivize real estate investment in Tokyo as opposed to other areas in Japan.

But the Tokyo real estate market remains central to Japanese and global real estate investors, and it is unlikely that the new regulations will shake it to any great extent. Perhaps more interesting to follow will be the development of investment and technological ecosystems driven by mandated emissions reductions and the development of offset markets. A 25 percent reduction in municipal emissions by 2020 is a reasonably aggressive target, but the highest leverage of the program may be the creation of scalable interventions that drive other building-level and regional efficiency programs in Japan and elsewhere. Finally, although it has idiosyncratic elements that must be kept in mind, the Tokyo cap and trade program offers an especially good opportunity to evaluate the effectiveness of such programs as climate change mitigation strategies in municipal, regional, and national contexts, thanks to the programs that preceded it and the TMG's commitment to an integrated emissions reduction strategy.

¹ Tokyo Metropolitan Government, Tokyo Climate Change Strategy: A Basic Policy for the 10-Year Project for a Carbon-Minus Tokyo (Tokyo: 2007), www2.kankyo.metro.tokyo.jp/kikaku/kikouhendouhousin/data/tokyo-climate-change-strategy_2007.6.1.pdf

² For a comprehensive overview of the policy, see Bureau of the Environment, Tokyo Cap and Trade System: Japan's First Mandatory Emissions Trading Scheme (Tokyo: Tokyo Metropolitan Government, 2010), www2.kankyo.metro.tokyo.jp/sgw/e/data/Tokyo-cap_and_trade_program-march_2010_TMG.pdf. This serves as the primary source for data in the implementation section.

³ The debate over the relative effectiveness of upstream and downstream approaches to cap and trade systems is ongoing, although conventional economic theory has tended to weigh in favor of upstream approaches. The TMG argues in its outline of the cap and trade policy that both upstream and downstream approaches merit attention.

⁴ See the description of this program at www.kankyo.metro.tokyo.jp/kouhou/english/2008/warming/cu01.html

⁵ On the Green Building Program, see www.kankyo.metro.tokyo.jp/kouhou/english/2008/warming/cu06_07.html#cu06

⁶ Stuart Biggs and Michio Nakayama, "Tokyo Carbon Trading Market Likely to Become National Model, Broker Says," October 1, 2010, www.bloomberg.com/news/2010-10-01/tokyo-carbon-trading-market-likely-to-become-national-model-broker-says.html

CASE STUDY 15:

Corporate Social Responsibility Disclosure



GEOGRAPHY	Malaysia
POLICY TYPE	Regulation
POLICY MEANS	Directing Capital

DESCRIPTION

Requirement for publicly listed companies to annually report on their corporate social responsibility activities

LESSONS FOR THE FIELD

- **Transparency:** The “comply or explain” approach to disclosure does not necessarily provide the comparable information that socially responsible investors need or will use to direct funds to Malaysia.
- **Commitment:** Government commitment to corporate social responsibility disclosure is important to the continued existence of the policy and its slow but meaningful uptake among Malaysian corporations.

IN BRIEF

The expansion of corporate social responsibility (CSR) in Malaysia is linked to efforts to attract the rapidly growing global socially responsible investment market and further the country’s economic development. As one result of these efforts, in 2006 the Prime Minister announced during a budget-related speech that publicly listed companies (PLCs) in Malaysia would no longer be encouraged to disclose information on their corporate social responsibility, but would be required to do so. The policy, supported by Bursa Malaysia’s listing requirements, has had moderate impact on the CSR disclosure of Malaysian PLCs but relatively little effect on increasing impact investment via public equities.

Policy Context and Development

Malaysia was formed as an independent nation in 1963 out of four former British colonies, and has an ethnically and culturally diverse population of just over 25.5 million.¹ Starting in the late 1960s, the government instituted a series of five-year plans under the New Economic Plan, intended to achieve wider economic development goals and correct racial imbalances in economic activity. The government remains a strong guiding force in Malaysian society and the economy.

The 1997-1998 Asian financial crisis hit Malaysia hard, dropping GDP precipitously and threatening the country's international reputation as a safe and profitable investment destination. Debate over the underlying issues of the crisis, including corporate governance, posed problems for Malaysia, which had used substantial foreign direct investment (FDI) to build its economy. The government, asserting that corporate governance standards contributed to the crisis, developed a program of corporate governance reform in response.²

CSR reporting requirements are a component of this corporate governance reform, an additional attempt to reform the country's businesses to make them attractive to FDI and portfolio investments. The Malaysian government laid out its case for promoting corporate social responsibility and CSR disclosure in a November 2005 speech by the then Deputy Chief Executive of the Securities Commission, Zarinah Anwar, who stated among other things that:

“Good CSR practices will enable companies to attract better quality investors and to better meet the challenges posed by increased competition for markets and capital... resulting in improved reputation and branding of Malaysian companies, whose enhanced performance will contribute towards our goal of establishing a premier capital market that will play a significant role in generating greater economic growth for Malaysia.”³

Anwar also noted the worldwide expansion of SRI funds as an important factor in support for CSR, saying, “indeed the last decade has seen an extraordinary growth in the scale and breadth of SRI... what is obvious here is the tremendous growth potential of SRI and hence the opportunities that SRI can offer as a viable source of capital.”⁴

CSR disclosure was originally voluntary, but the government supported it strongly, feeling that disclosure would take deeper root and have more substance if it developed organically from within Malaysian companies. It pushed government-linked companies (GLCs) early on to create and report on extensive social responsibility programs.⁵ Bursa Malaysia, the Malaysian stock exchange, published a CSR framework for publicly listed companies in 2006, an additional educational step intended to encourage greater CSR performance and disclosure. Encouraging CSR for both PLCs and GLCs has been a strategic calculation by the Malaysian government to take advantage of existing global opportunities to attract investment and drive capital market and economic growth.

In 2006, recognizing that voluntary requirements for CSR disclosure and performance were having little if any affect, the Prime Minister, Abdullah Ahmad Badawi, announced that as of 2008, the government would require all PLCs in Malaysia to publicly report their CSR activities.⁷ In support of this policy, Bursa Malaysia changed its listing rules to require such reporting, and it was thought that a reporting requirement would promote better CSR performance.

Implementation

In accordance with government policy, Bursa Malaysia listing requirements require that companies listed on their exchange include in their annual report “a description of the corporate social responsibility activities or practices undertaken by a listed issuer and its subsidiaries or if there are none, a statement to that effect.”⁸ Although the law does not specify what such a description would look like, Bursa Malaysia and the Malaysian Institute of Accountants published guidance focusing on CSR activities and practice in four areas: “Marketplace”, “Environment”, “Workplace”, and “Community”.⁹ Presumably, Bursa Malaysia will delist corporations that do not comply, but the “comply or explain” nature of the requirement makes it easy for corporations not engaging in CSR to meet the basic standard.

The government, particularly the Securities Commission, continues to talk about the importance of CSR and encouraging better performance. The government uses GLCs as examples for other corporations to follow, and has mentioned that nationally controlled financial institutions like the Employee Provident Fund would “consider favorably PLCs with good CSR practices.”¹⁰ In addition to tax incentives for positive CSR practices, the government has supported the growth of CSR initiatives.¹¹

Government support and listing requirements notwithstanding, CSR is still in a relatively nascent stage and the quality and content of disclosure has increased slowly.¹²

Impact

A report on CSR in Malaysia in 2007 found poor awareness of CSR among PLCs and a lack of involvement in CSR activities.¹³ Because only two years have elapsed since the CSR disclosure requirement went into effect, it is difficult to say whether or not the regulation has been successful at increasing the quality and number of CSR-aware and active PLCs. Since the regulation was implemented, however, reporting and CSR involvement has increased, and Malaysia currently leads Association of South East Asian Nations (ASEAN) countries in the number of companies producing sustainability reports.¹⁴ The Asian Sustainability Rating notes that CSR disclosure by PLCs has increased, but notes that disclosure is just one part of an SRI investor’s decision-making process, highlighting in particular that British American Tobacco is Malaysia’s highest ranked company on the basis of CSR reporting.

The extent to which this initiative has been able to attract foreign investment and socially responsible investors is unclear. Since the regulation was passed, the global economy has been in a recession, affecting investors of all types. It is worth noting that the SRI market in Malaysia as of July 2008 was around \$14 million.¹⁵ There is potential for Malaysia to attract funds from the area, but to date it appears that Malaysia’s biggest success has been in Shariah-compliant funds and Islamic banking.¹⁶

Future Directions

Malaysia has made great progress in CSR over the last decade, due in no small part to commitment by the government. It is recognized as among one of the most active emerging economies with respect to corporate social responsibility.¹⁷ Bursa Malaysia aims to create its own ESG index within the next few years to attract interested investors, which may also draw added funds from the international SRI community.¹⁸ However, the country’s reliance on voluntary efforts and bare minimum regulations to encourage greater CSR performance and attract SRI may be a slower tactic than other potential policy avenues.

Malaysia has been particularly successful in Shariah finance, which may bode well for efforts to attract SRI investment. Nearly 20 percent of the country’s banking industry is composed of Shariah assets, and 88 percent of securities listed on Bursa Malaysia are Shariah compliant.¹⁹ There are nearly 150 Shariah

investment funds in Malaysia, far more than the rest of the Asian community.²⁰ Malaysia's efforts to attract global Shariah capital was supported by the country's large Muslim population and a variety of policy instruments that established a favorable infrastructure for such investments. In theory, Malaysia's success with one ethical investing industry portends well for broader SRI, but whether or not international investors will agree remains to be seen.

¹ CIA World Factbook, "Malaysia," <https://www.cia.gov/library/publications/the-world-factbook/geos/my.html>

² Pik Kun Liew, "The (Perceived) Roles of Corporate Governance Reform in Malaysia: the Views of Corporate Practitioners" (working paper no. 06-02, Essex Business School, 2006, p. 8), www.essex.ac.uk/ebs/research/working_papers/WP_06-02.doc

³ Dato' Zarinah Anwar, Deputy Chief Executive of the Securities Commission, "Corporate Social Responsibility in Asia Pacific: Malaysia's Role in Promoting CSR" (speech given at Lex Mundi Asia Pacific Regional Conference, Shangri-la Kuala Lumpur, November 12, 2005).

⁴ Ibid.

⁵ US Department of State, Bureau of Economic, Energy and Business Affairs, "2010 Investment Climate Statement—Malaysia," (Washington, DC: March 2010).

⁶ Global SRI Market estimated in September 2008 to be approximately €5 trillion. EuroSIF, "European SRI Study 2008," www.eurosif.org/research/eurosif-sri-study/2008; Mustaruddin Saleh, Norhayah Zulkifi, and Rusnah Muhamad, "Address by Y Bhg Tan Sri Zarinah Anwar, Chairman, Securities Commission Malaysia, at the Announcement of the Second StarBiz-ICR Malaysia Corporate Responsibility Awards," 2009; Mustaruddin Saleh, "Corporate Social Responsibility in an Emerging Market: A Longitudinal Analysis Approach," *International Business Research* 2, no. 1 (2009): 131; Azlan Amran and S. Susela Devi, "The Impact of Government and Foreign Affiliate Influence on Corporate Social Reporting: The Case of Malaysia," *Managerial Auditing Journal* 23, no. 4 (2008): 391-92.

⁷ Prime Minister Yab Dato' Seri Abdullah Bin HJ. Ahmad Badawi, "The 2007 Budget Speech," delivered September 1, 2006.

⁸ Bursa Malaysia listing requirements, Chapter 9, Appendix 9C, Part A, Paragraph 29, Page 204, www.klse.com.my/website/bm/regulation/rules/listing_requirements/downloads/bm_mainchapter9.pdf

⁹ World Federation of Exchanges, "2008: CSR Disclosure Incorporated into Listing Requirements,"

www.world-exchanges.org/sustainability/m-6-4-4.php; Bursa Malaysia, "Corporate Social Responsibility (CSR) Framework for Malaysian Public Listed Companies," www.klse.com.my/website/bm/about_us/the_organisation/csr/downloads/csr_writup.pdf

¹⁰ Amran and Devi, 399; Badawi, "2007 Budget Speech."

¹¹ Jye Y. Lu and Pavel Castka, "Corporate Social Responsibility in Malaysia-Expert's Views and Perspectives," *Corporate Social Responsibility and Environmental Management* 16 (2009): 146-54; Geoffrey Williams, "Going beyond the 'Mock Cheque'," *Malaysian Business*, November 16, 2007.

¹² Anwar; Lu and Castka, 147.

¹³ Mustaruddin Saleh, Norhayah Zulkifi, and Rusnah Muhamad, "Corporate Social Responsibility Disclosure and its Relation on Institutional Ownership," *Managerial Auditing Journal* 25, no. 6 (2010): 593.

¹⁴ "Malaysia Leads in Sustainability Reporting," *Accountants Today*, June 2010, 10-13.

¹⁵ Cynthia Ann Peterson, "Putting Money in Ethics," *Malaysian Business*, July 16, 2008.

¹⁶ Social Investment Forum, "Emerging Markets Investor Survey Report: An Analysis of Responsible Investment in Emerging Markets" (Washington, DC: 2009), socialinvest.org/resources/research/documents/EMDPpaper062609.pdf

¹⁷ US Department of State, "2010 Investment Climate Statement—Malaysia"; Social Investment Forum, "Emerging Markets."

¹⁸ "Bursa to Offer ESG Index in a Few Years," ASRIA, October 27, 2009.

¹⁹ Soraya Permatasari, "Islamic U.S. Mutual Funds Flocking to Malaysia: Islamic Finance," *Bloomberg Businessweek*, August 16, 2010; Securities Commission Malaysia. "Capital.My." July 2010.

²⁰ ASRIA SRI Funds Portal, portal.asria.org/sri_fund/summary.html

CASE STUDY 16:

National Rental Affordability Scheme



GEOGRAPHY	Australia
POLICY TYPE	Tax Credit
POLICY MEANS	Directing Capital

DESCRIPTION

Tax credit for investment in affordable housing

LESSONS FOR THE FIELD

- **Targeting:** By addressing a discrete, clearly identified need in the market, NRAS demonstrates that modest subsidies can stimulate significant private market activity.
- **Engagement:** Collaborating on policy design with target investors, in this case pension funds and banks, might have helped alleviate perceived risks in affordable housing in Australia and ensured the participation of these groups from the beginning.
- **Implementation:** NRAS hit some roadblocks early on its implementation and has only recently become more broadly applicable thanks to rulings from two related government bodies: the tax office and the peak investment industry regulator.

IN BRIEF

Australia created the National Rental Affordability Scheme (NRAS) in 2008 as a response to rising living costs resulting from insufficient housing stock. NRAS is a supply-side intervention that provides a tax credit or cash payment over 10 years for construction of affordable property, rented at a minimum of 20 percent below the market rate. NRAS was initially funded to support the construction of 50,000 new homes, although this will likely expand to at least 100,000. The program is gaining momentum, and analysts expect the approval for construction of 40,000 new homes before the end of 2010. However, difficulties in the early years might have been prevented by additional pre-implementation investor engagement and agency coordination. Practitioners also note that, although NRAS was intended as a market-driven initiative, the application process is in fact overly bureaucratic and burdensome.

Policy Context and Development

Australia was the strongest performing developed country through the 2008-09 global financial crisis and has escaped economic recession since 1993, with strong growth through the Asian financial meltdown of 1997-98 and the recession in the industrialized world in 2001. Economic prosperity has driven growth in the property market, with median house prices rising from approximately three times average household earnings in the early 1990s to approximately five times today,¹ resulting in the highest ratio of rents to average weekly earnings since the late 1980s.² The fundamental problem is a lack of housing supply.³ Researchers estimate that Australia's "social housing stock" (including government and not-for-profit owned and managed affordable housing for low- and moderate-income groups), accounting for 5 percent of all dwellings, falls at least 260,000 units short of requirements to accommodate the most needy and to provide opportunities for other key workers and moderate-income households to access jobs-rich areas.⁴ Rental vacancy rates are below 2 percent in all state capital cities in Australia.⁵

Although residential property is the largest single asset class in Australia, valued around A\$3.2 trillion (\$3.1 trillion), institutional investors have largely steered clear of the market because of high transaction and maintenance costs; because of fragmentation, with the market dominated by small landlords with one or two rental dwellings; and because the expected return on investment is too low given the perceived risks, including capital losses, interest rate and inflation risk, rental yield risk, the political risk associated with possible changes to relevant government policies, and "brand" risk, which is particularly intractable and primarily focused on the potential damage resulting from direct ownership of a property from which tenants are evicted.⁶

The lack of affordable housing is especially acute for low- and middle-income renters. One in five of all those who rent, or 685,000 individuals and families, meet Australia's definition of rental stress, paying more than 30 percent of their income for housing.⁷

Recognizing the scale of the problem, the Australian federal government recreated the position of Minister for Housing in 2007, after 11 years without one, and convened an intergovernmental working group that resulted in four initial policies: First Home Saver Accounts, a tax-advantaged savings vehicle with matching government funds; the Housing Affordability Fund, a A\$500 million (\$485 million) investment that supports local infrastructure costs typically included in the purchase price of properties; the release of more federally owned land for development; and NRAS. NRAS was launched as an explicitly market-driven initiative, with the intention of "creating a new class of institutional investment in Australian affordable rental housing."⁸

Implementation

The Australian federal government initially committed more than \$1 billion (\$970 million) to the NRAS over four years, to stimulate construction of up to 50,000 homes and apartments, although it has made clear its intention to expand the program to at least 100,000 new residences.⁹ NRAS is a tax incentive modeled on similar programs in the United States, providing a tax credit over 10 years for construction of affordable property, rented at a minimum of 20 percent below the market rate. The credit is replaced with an equivalent

POLICY IN ACTION:

Queensland Affordable Housing Consortium (QAHC)

QAHC is the largest recipient of NRAS tax credits, with 2,400 approved dwellings (10,000 expected at the end of 2010). Like most not-for-profits, QAHC uses the credits to provide rental accommodation at 25 percent below the market rate.

QAHC is a consortium of more than 50 members, including developers and other commercial entities, local governments, and not-for-profit housing organizations. Although QAHC is slowly making inroads with institutional investors like pension funds, home buyers thus far are primarily individuals, developers, and community-based organizations.

cash payment for not-for-profit organizations with no tax burden. In 2008, the incentive was A\$6,000 from the Australian federal government and A\$2,000 from state governments, per residence. The incentive, which is tax-free and indexed to the rental component of Australia's inflation measure, the Consumer Price Index, has since increased to A\$9,140 (\$8,866), 75 percent of which continues to come from the federal government and 25 percent from the states. Tenant eligibility is based on income. Approximately 1.5 million households qualify to rent NRAS properties. In practice, state government guidelines ensure that almost all NRAS properties are managed by not-for-profit housing providers, most of which offer rents of at least 25 percent below the market rate, in part to satisfy charitable requirements in tax law.

NRAS has been implemented through funding rounds, the third and fourth of which close in August 2010 and December 2010. The rounds call for applications from different groups of investors for the construction of at least 20 or 1,000 dwellings (for retail and institutional investors, respectively). The federal and state governments assess each application, dwelling by dwelling, for criteria including location, residence details, expected tenants, property management arrangements, and expected rent structure—a process that creates a significant role for the public sector that some practitioners argue is unnecessary and counter to the policy's objective.

Impact

Rounds one and two of NRAS provided incentives for the construction of more than 10,500 affordable rental homes. Rounds three and four are expected to take the total number of approved new dwellings to approximately 40,000.¹⁰ NRAS effectively increases the standard residential net income return in Australia from about 2 percent for not-for-profit housing providers to 5 percent.¹¹

The geographic distribution of awards appears to provide evidence that, because the incentive is fixed, the policy favors markets where the cost of land and development is relatively cheaper. For example, the state of New South Wales, with Sydney as its capital, has been allocated 23 percent of NRAS homes, but has 32 percent of Australia's resident population. On the other hand, Tasmania has received 9 percent of the allocated new homes, but has just 2 percent of the population. This creates disincentives for investing in Australia's most unaffordable markets.¹²

The policy has failed so far to attract the interest of institutional investors in need of more aggregation, liquidity, and clear risk profiling. Investors were not sufficiently engaged at the outset of the policy to address these needs.¹³ Critics have also argued that the policy implementation lacked coordination with other arms and levels of government, including the states, the Australian Tax Office, and the peak regulator of investment products, the Australian Securities and Investment Commission, which continues to create uncertainty.¹⁴ For example, in the fourth round of funding, the New South Wales state government has announced that it will limit the number of incentives available to for-profit applicants to 1,250 dwellings, undermining the federal government's more ambitious targets.¹⁵

Finally, the government introduced NRAS at a difficult economic time, when many investors were overexposed to the property asset class as a result of the decline in listed equity markets.

Future Directions

In order to better target NRAS, attract investors, and streamline implementation, industry leaders have recommended the following improvements: adjusting the public subsidy so that it varies in line with the cost of land and the value of the rental subsidy that the landowner is expected to offer; undertaking a concerted investor outreach and education campaign; and moving to a system of implementation through assessments of the business case of intermediary organizations, rather than the current focus on dwellings. Greater flexibility for investors may provide greater leverage in negotiations with property developers and allow for more targeted packaging of deals.

The retail, fragmented structure of ownership in Australia's residential housing market is especially problematic for policymakers, creating incentives for short-term rental leases that undermine both the longer term time horizons of investors and the stability and predictability that tenants desire, particularly tenants with families. NRAS is likely to have a positive impact on this front, but at the margins.

1 Commonwealth of Australia, "Australia's Future Tax System: Report to the Treasurer December 2009" (Canberra: 2010).

2 Ibid.

3 News.com.au, "Lack of Housing Will Challenge Recovery-Reserve Bank," March 10, 2010,

www.news.com.au/money/property/lack-of-housing-will-challenge-recovery-reserve-bank/story-e6frfmd0-1225838977173

4 SGS Economics and Planning, "A Vision and Plan for Social Housing in Australia" (Bendigo: PowerHousing Australia, July 2009).

5 Real Estate Institute of Australia, "Real Estate Market Facts," September 2007.

6 Mike Berry and Jon Hall, "Institutional Investment in Rental Housing in Australia: A Policy Framework and Two Models," *Urban Studies* 42, no. 1 (2005): 91-111.

7 National Center for Social and Economic Modelling, "Housing Stress in Australia," 2003-04 and 2007, 2008.

8 Commonwealth of Australia, "Making Housing Affordable Again" (press release, March 2008).

9 Commonwealth of Australia, "Government to Build 100,000 Affordable Rental Properties and Kick-Start Housing Construction Reform" (press release, Office of the Prime Minister, March 3, 2008).

10 Interview with Mike Myers, Managing Director, Queensland Affordable Housing Consortium, July 14, 2010.

11 James Dunn, "Low Cost, Not Low Returns: Affordable Housing," *The Australian*, May 26, 2010,

www.theaustralian.com.au/business/wealth/low-cost-not-low-returns-affordable-housing/story-e6frgac6-1225870686052.

12 Queensland Shelter, "Post Implementation Review on the National Rental Affordability Scheme, Queensland Shelter Submission," October 2009.

13 Interview with Mike Myers, July 14, 2010.

14 Interview with Michael Kerans, Managing Director, Affordable Housing Australia, July 26, 2010.

15 New South Wales State Government, Department of Housing,

<http://www.housing.nsw.gov.au/Centre+For+Affordable+Housing/NRAS/>

B. Additional Policies

Cadenas Productivas (Productive Supply Chains, Mexico): Part of an effort by Mexico's largest state-operated development finance institution, Nacional Financiera (Nafin), to support small enterprise development through improved access to credit and capacity-building, the Cadenas Productivas program offers small businesses technical support, training, and free access to online factoring services. The Cadenas program enables small producers to access financing that would be otherwise unavailable because of high risk and transaction costs, using their accounts receivable as a source of liquidity for their business. It is coordinated with other technical assistance and training programs designed to increase the readiness of SMEs for commercial financing.

Climate Awareness Bonds (Global): Starting in 2007, the European Investment Bank began issuing Climate Awareness Bonds in areas including Japan (April 2010), Scandinavia (November 2009), and the EU (2007). It has issued over €1 billion (\$1.41 billion) in Climate Awareness Bonds, the proceeds from which finance projects supporting climate protection. These bonds complement existing climate-related and renewable energy financing projects that the EIB has engaged in.

Community Development Block Grants (US): The Community Development Block Grant (CDBG) program, started in 1974, is one of the longest continuously running programs at the US Department of Housing and Urban Development (HUD). The CDBG program provides annual grants on a formula basis to 1,209 general units of local government and states to address a wide variety of community development needs. At least 70 percent of each grant must be used for activities that benefit low- and moderate-income persons. The remaining 30 percent may be used for other projects, including those that prevent or eliminate slums and blight. All entities that receive these grants must develop plans that include citizen participation, providing reasonable public access to meetings, permitting an opportunity for review of proposals and performance of existing programs, and establishing a grievance and complaint process. The CDBG program is one of the three leading federal funding sources for US community development corporations (CDCs).

Community Reinvestment Act (US): The 1977 Community Reinvestment Act (CRA) encourages depository institutions to help meet the credit needs of the communities (specifically stressing low- and moderate-income communities) in which they operate, in line with safe and sound banking operations. The CRA requires federal financial institution regulators to examine the extent to which depository institutions are adhering to the spirit and the letter of their obligations to the community, and take their record into account when evaluating applications for bank mergers, acquisitions, or branch openings. Each institution's performance is evaluated on the basis of their individual circumstances. All banks that receive federal depository insurance must adhere to this statute.

EU Directive 2009/28/EC (EU): This directive sets mandatory alternative energy targets for member states based on their overall share of energy from renewable sources (in gross final consumption of energy) as well as for the share of energy from renewable sources in transportation. Each state's target is calibrated to ensure that on the whole, the EU is able to reach a 20 percent share of renewable energy by 2020. It requires each member state to create a national plan to implement this directive and pass appropriate laws and regulations to support the plan. Targets range from 10 percent (Malta) to 49 percent (Sweden).

HOME Investment Partnership (US): Run by the HUD, HOME Investment Partnership was part of the 1990 Cranston-Gonzalez National Affordable Housing Act. The HOME program awards block grants to state and local governments to develop affordable housing. Governments can use program funds to build new housing

projects, buy and rehabilitate existing housing stock, provide direct rental assistance to low-income persons, or for “other reasonable and necessary expenses related to the development of non-luxury housing.” The program requires that the state or locality match 25 percent of all grant funds. A provision of the program requires state and local governments to set aside at least 15 percent of their allocation to support Community Housing Development Organizations (CHDOs). HOME is one of the three top federal funding sources for CDCs.

HOPE VI (US): The HOPE VI Program was developed as a result of recommendations by the National Commission on Severely Distressed Public Housing, which was charged with proposing a national action plan to eradicate severely distressed public housing. HOPE VI was created by the Department of Veterans Affairs, HUD, and the 1993 Independent Agencies Appropriations Act. It provides funding to public housing authorities to demolish, rehabilitate, or replace severely distressed public housing; revitalize the sites on which such projects were located and improve the surrounding neighborhood; create mixed-income housing; and build sustainable communities. Hope VI funds were used to leverage billions in private, philanthropic, and additional public funds. As of 2010, Hope VI has been mostly phased out, replaced with the Choice Neighborhoods program.

NeighborWorks America (US): NeighborWorks America is a national nonprofit organization that Congress created in 1973 to provide financial support, technical assistance, and training for community-based revitalization efforts. NeighborWorks America works to create and preserve affordable housing opportunities and build stronger communities through a variety of programs including homeowner education and counseling, building the capacity of organizations that work to support affordable housing, and grants to help local NeighborWorks organizations rehabilitate affordable housing nationwide, including smaller and rural communities with affordable housing needs.

New Markets Venture Capital Program (US): The New Markets Venture Capital (NMVC) Program, administered by the US Small Business Administration (SBA), was designed to provide capital and operational assistance grants to venture capital companies that invest 80 percent (by both number and total dollar value) in smaller enterprises in low-income areas. In order to be eligible to apply for designation as an NMVC fund, an applicant must (i) have a diverse management team with demonstrated experience in community development finance and/or relevant venture capital finance; (ii) have a primary mission of economic development of one or more low-income areas; (iii) direct its activities to a specific target market; (iv) commit to raising investment capital (minimum \$5 million) from nonfederal sources; and (v) raise at least 30 percent of its capital from sources other than SBA.

Renewable Energy Production Tax Credit (US): The Renewable Energy Production Tax Credit (PTC) is a per-kilowatt-hour corporate tax credit for electricity generated by qualified energy resources and sold by the taxpayer to an unrelated person during the taxable year. Originally enacted under the Energy Policy Act of 1992, the PTC has been renewed and expanded numerous times. The tax credit amount is 1.5¢/kWh in 1993 dollars (indexed for inflation) for some technologies such as wind and geothermal, and half of that amount for others including hydroelectric and solid waste. The rules governing the PTC vary by resource and facility type, and the tax credit is reduced for projects that receive other federal tax credits, grants, tax-exempt financing, or subsidized energy financing. Through the American Recovery and Reinvestment Act (passed in February 2009), Congress acted to provide a three-year extension of the PTC through December 31, 2012.

Renewable Portfolio Standards (various): Renewable portfolio standards (RPS) are regulations that require electricity providers to obtain a minimum percentage of their power from renewable energy resources by a certain date. RPS exist at the national level in Britain, Italy, Belgium, and Chile, and in more than half of the US states, including the District of Columbia. US state percentage requirements vary from 10 percent to 40 percent with target dates ranging from 2013 to 2030.

Section 8 Vouchers (US): The Housing Choice Voucher Program (Section 8) is a federal housing program that provides housing assistance to low-income renters and homeowners. This assistance comes in the form of rental subsidies paid to the landlord directly by public housing authorities on behalf of the participating family. The participant is free to choose any housing that meets the requirements of the program and is not limited to units located in subsidized housing projects. Housing choice vouchers are administered locally by public housing agencies (PHAs), funded directly from the US Department of Housing and Urban Development (HUD).

Sustainable Communities Initiative (US): In 2009, HUD, the US Department of Transportation, and the Environmental Protection Agency announced a joint partnership that would improve access to affordable housing, offer citizens better lower cost transportation options, and help protect the environment. For 2010, Congress allocated \$150 million for the Sustainable Communities Initiative. Of that total, approximately \$100 million was made available for regional integrated planning initiatives through HUD's Sustainable Communities Planning Grant Program. The first grants were announced in August 2010.



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C. Attendees: Policymaking for Impact Investing Innovation

A roundtable held on June 22nd, 2010, at Harvard Kennedy School, supported by
The Annie E. Casey Foundation

Margot	Brandenburg	The Rockefeller Foundation
Jenny	Everett	Aspen Network of Development Entrepreneurs
Wayne	Fawbush	Ford Foundation
Brinda	Ganguly	The Rockefeller Foundation
Lisa	Hagerman	More for Mission
Matt	HoganBruen	Bank of America Capital Access Fund
Ted	Howard	Democracy Collaborative
Tomer	Inbar	Patterson Belknap Webb & Tyler LLP
Justina	Lai	The Rockefeller Foundation
Sujata	Lamba	International Finance Corporation
Chuck	Laven	Forsyth Street Advisors
Christine	Looney	Ford Foundation
Steve	Lydenberg	Initiative for Responsible Investment
Euan	Marshall	International Finance Corporation
Deborah	Momsen-Hudson	Center for Responsible Lending and Self-Help Credit Union
Mike	Musuraca	Blue Wolf Capital Management
Mark	Newberg	US Small Business Administration
Buzz	Roberts	Local Initiatives Support Corporation
Kristin	Siglin	Enterprise Community Partners
Beth	Sirull	Pacific Community Ventures
Anna	Steiger	Federal Reserve Bank of Boston
Ben	Thornley	Pacific Community Ventures
Christa	Velasquez	The Annie E. Casey Foundation
Stockton	Williams	Living Cities
David	Wood	Initiative for Responsible Investment
Betsy	Zeidman	The Milken Institute
Christina	Zimmermann	Principles for Responsible Investment



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