Miller Center
for Social Entrepreneurship

Total Portfolio Activation for Impact: A Strategy to Move Beyond ESG

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Lala Faiz, Charly Kleissner, John Kohler, Nancy Y. Lin

The authors of this paper wish to express their gratitude to the following:

Foreword

Capital investments are crucial for social enterprises to scale their impact. That's why impact investing is an important aspect of our work at Santa Clara University's Miller Center for Social Entrepreneurship. Our efforts supporting social enterprises to eradicate poverty, address the negative impacts of climate change, and economically empower women require the mobilization of capital specifically intended to generate positive social and environmental impact—in other words, impact investing.

John Kohler, senior director of the Impact Capital team at Miller Center, in conjunction with leaders at KL Felicitas Foundation, Toniic, and other organizations, have pioneered strategies that enable impact investors to mobilize capital to all asset classes—meaning their full portfolios—with the intention of generating social and environmental returns. The Total Portfolio Activation for Impact strategy outlined in this white paper lays out an investment approach for investors committed to generating positive social or environmental impacts while also maintaining competitive financial returns.

This strategy represents only a sliver of the spectrum of impact investing, but this thin slice contains the vast majority of capital available through existing investment vehicles. We hope that by sharing this work and putting it into the public domain, our model approach will encourage more individuals, foundations, and wealth managers to invest their entire portfolios for impact.

It is unrealistic, however, to expect that many social enterprises addressing problems of poverty, climate change, and gender inequality will always generate competitive financial returns in any asset class. Even as social enterprises employ earned-income models to reduce the need for contributions, endeavors with deep social and environmental impact are unlikely to sustain themselves on earned-income alone. Thus, in addition to total portfolio activation, it is essential to activate capital along the entire financial return spectrum, from "market-rate" to pure philanthropy.

Miller Center innovates investment vehicles, such as structured exits, in which the financial return can be tuned commensurate with the expected impact. An

Iluméxico is a Miller Center GSBI Alumni that used the demand dividend structure exit for its funding.

example is the demand dividend, which can be tuned to yield competitive returns, 100% of capital (i.e., a "roundtrip"), or even a partial subsidy, such as 80% return of capital. The demand dividend thus offers an advantage over philanthropy, where donated money never returns.

As we set free the Total Portfolio Activation strategy summarized in this white paper, Miller Center extends an invitation to those with a passion for social justice: Join us as we experiment with new vehicles for impact investing. Together, we can broaden impact investing into a much bigger movement, mobilizing more capital in those regions of the spectrum that cannot generate market-rate financial return, yet have the greatest potential for outsized impact.

Thane Kreiner, Ph.D., Executive Director
Miller Center for Social Entrepreneurship

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Executive Summary

Occupying space on the continuum between pure-profit investment, which seeks only to maximize financial returns, and philanthropy, where financial returns are largely ignored, impact investing endeavors to balance financial return with measurable social or environmental impact.

Impact-minded public market investors have traditionally used environmental, social, and governance (ESG) factors to measure sustainability and the positive contributions of the primarily public companies they invest in.

Today, many fund managers and asset owners want to move beyond ESG, but they struggle with how to manage risk and produce competitive returns. They have to thread their own way among the available investment options, putting together portfolios that, for instance, mix traditional investments with philanthropy, or that rely on researching and screening individual private companies for direct investment opportunities. These private companies that intentionally pursue positive social and environmental solutions operate in areas with the greatest need, which could be thousands of miles distant from where the investors are located, requiring an assumption of risk outside the comfort zone of the originating investor.

The goal of the Total Portfolio Activation for Impact strategy described in this paper is to provide concrete guidance to those interested in constructing impact investment portfolios that yield competitive returns while simultaneously achieving high levels of impact and managing risk. The work described herein draws from earlier work, including several publications that introduced the concept of establishing impact across asset classes, as well as recent publications by pioneering investors and foundations providing ‘open source’ examples of their investments with a variety of asset classes and associated returns. Those publications are listed in the Appendix for further reading.

Enough peer-vetted investment choices now exist to allow fund managers to begin modeling and implementing different portfolios based on themes, or geographies, or minimum yields and risk management. This paper creates the next evolutionary step in the process of impact investing, benefiting from the critical mass of impact investments that have been shared by other impact investors or curated by investor organizations such as Toniic.

The Total Portfolio Activation for Impact strategy itself arose at Santa Clara University's Miller Center for Social Entrepreneurship, driven by John Kohler, Miller Center's Director of Impact Capital, in collaboration with Lala Faiz, Miller Center's Director of Financial Innovation programs; Charly Kleissner, Co-Founder of Toniic, Social-Impact International, and KL Felicitas Foundation; and Nancy Y. Lin, Miller Center's Program Director for Impact Capital.

Built upon four measurable key principles, this strategy provides a framework for balancing impact investment choices across a range of asset classes. It factors in geographic diversification and describes relevant investment themes—sustainable agriculture; water and land; clean energy; health care; education; and financial services—including rationales and examples for each theme. The paper concludes with guidance for defining social and environmental impact, and for assessing impact by theme.

This paper then provides practical advice for constructing a portfolio based on the Total Portfolio Activation for Impact strategy. It presents model portfolios along with the considerations used to develop them; describes how to allocate investments to best balance impact and returns; and explains what cash flows and yields can be expected from such model portfolios. The paper ends with a thorough discussion of the due diligence required for constructing and managing portfolios based on this strategy.

It is the intention of this paper to encourage more interested parties to engage in impact investing as well as to make those efforts more financially satisfying and successful.

PART ONE: Conceptual Overview

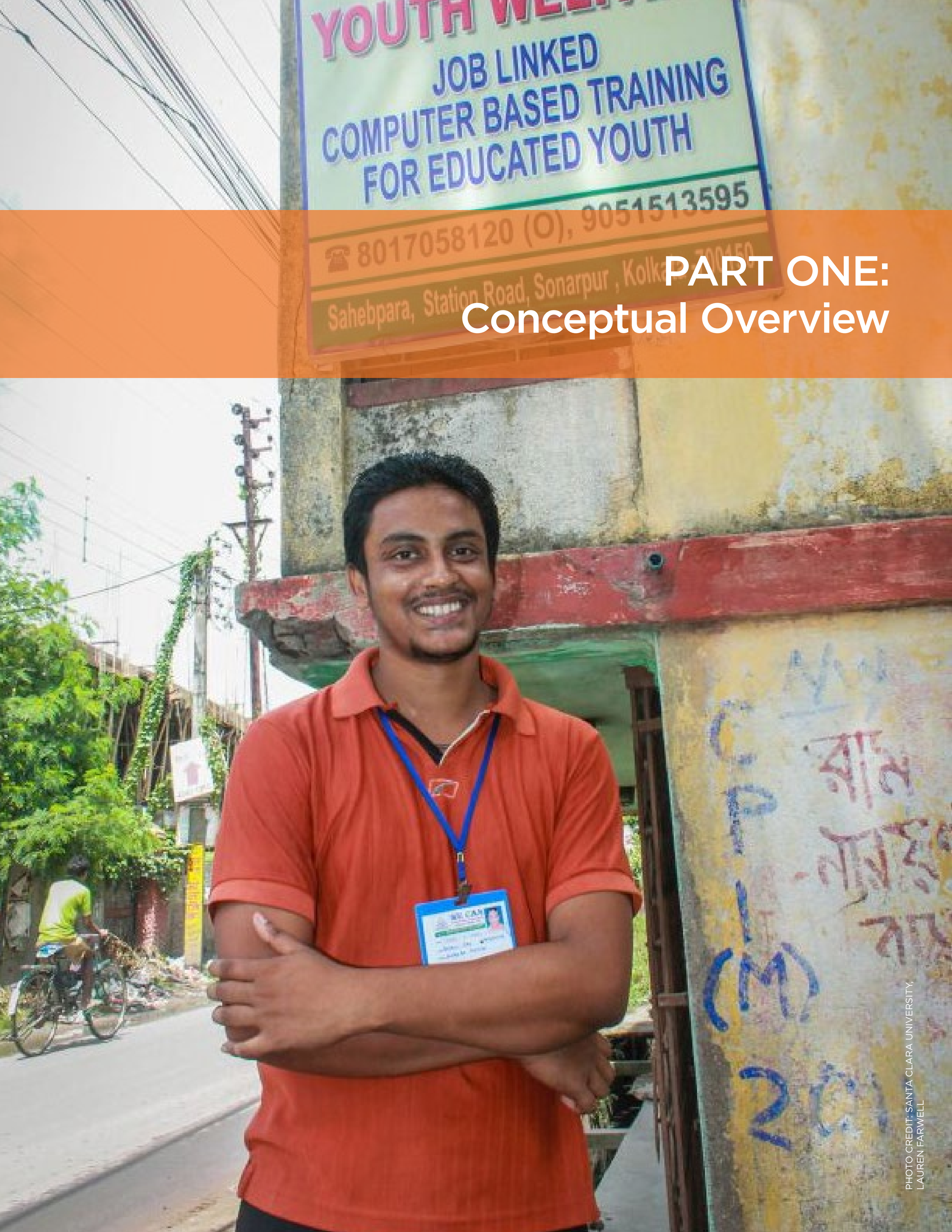


PHOTO CREDIT: SANTA CLARA UNIVERSITY, LAUREN FARWELL

1.0 FROM CONCEPT TO STRATEGY: TOTAL PORTFOLIO ACTIVATION FOR IMPACT

Whether termed social, responsible, or impact investing, "A growing number of investors, institutions, and financial professionals are deploying and managing capital to build a more sustainable and equitable economy," according to a report[1] from USSIF, the Forum for Sustainable and Responsible Investment.

Most people investing for impact dedicate a portion of their money to impact investments, often through direct investments. However, a growing number of high-net-worth individuals, family offices, and private foundations are choosing to invest a greater proportion (and sometimes all) of their capital across several asset classes while maintaining the goal of driving positive and measurable social or environmental outcomes.

The following strategy attempts to balance what are often contradictory goals by demonstrating how to assemble an investment portfolio that produces returns competitive with the performance of traditional investments while also pursuing high levels of positive and measurable social and environmental impact. The goal is to prove that investment capital can also be 'impact' capital and play a critical role toward improving a world in which resources for growth and prosperity are increasingly limited. However, many forms of social and environmental impact are unlikely to generate competitive financial returns in any asset class; to eradicate poverty and address the impacts of climate change will require mobilization of impact investors who do not require competitive financial returns, along with philanthropists.

This strategy is a product of Santa Clara University's Miller Center for Social Entrepreneurship. It is also informed by the work of Charly Kleissner and Sonen Capital, who together published the first publicly disclosed study on a seven-year effort to construct a total impact investment portfolio.[2] This work also benefits from the rich discussion and experience of 100% impact portfolio members – or "100%-ers" – at Toniic, an impact investor community that both Mr. Kleissner and

Miller Center's John Kohler (along with others) co-founded six years ago. These experiences provide a unique starting point from which emerged the structure for a second-generation 100% impact investment portfolio: Total Portfolio Activation for Impact.

1.1 THE NEED FOR A NEW INVESTMENT APPROACH

The Total Portfolio Activation for Impact strategy is expected to be most attractive to asset owners, family foundations, mission-based institutions (e.g., Catholic institutions, international non-governmental organizations [INGOs]), universities, and corporations interested in achieving social good with their money but who also want reasonable returns on their investments. To date, these investors have allocated a portion of their investment activities to include social and environmental impact, but they have lacked sufficient number of entry points into a broader array of asset classes.

The strategy is also relevant to fund managers and investment advisors looking for a more sophisticated response to clients who desire access to a mission-based or diversified portfolio of both direct and indirect impact investment opportunities for at least a portion of their investable assets.

Previously, the majority of investment approaches forced interested capital to trade off between social impact and financial returns. Often, impact-interested investors rely on traditional investing for their financial returns and turn to philanthropy to fulfill their desires for social impact—creating separate, parallel pathways for their capital. But while philanthropy plays a critical role in providing social benefit—for example, in response to disasters and other emergencies or to de-risk investments—it alone is not sufficient to enable systemic and long-term social and environmental benefit.

The Total Portfolio Activation for Impact strategy provides an attractive alternative for those interested in fueling positive social and environmental change, building on recent work and demonstrating the existence of investment targets able to provide intentional impact within a broad set of asset classes. The strategy also helps manage the risk inherent in investing in concentrated positions by diversifying financial and impact risk across multiple asset classes.

1.2 THE TOTAL PORTFOLIO ACTIVATION FOR IMPACT STRATEGY—KEY PRINCIPLES

The notion of investing capital with the intent to generate both financial returns and positive social or environmental impact has captured the imagination of thoughtful investors across the globe.

The Total Portfolio Activation for Impact portfolio strategy is designed with the following tenets in mind:

Intentionality—The Global Impact Investing Network (GIIN)[3] defines intentionality as the purposeful aim of the investor to generate social and/or environmental impact through investments. The asset allocation strategy should go beyond negative screens and focus on responsible, thematic, and/or impact-first investments. For example, investments might increase access to financial services, education, healthcare, affordable housing, or high-quality employment for underserved populations. Investments might also be focused on solutions aimed at mitigating the negative effects of climate change and environmental degradation. Investor activities can be focused in developed or emerging markets, or sometimes both. Investment themes that lend themselves to an attractive and measurable amount of impact are given in **Section 1.6**.

Investment with return expectations—Impact investments have the potential to deliver competitive, risk-adjusted financial performance with far-reaching social and environmental impact. Recently, the results of a few pioneering 100% impact portfolios have been made available and demonstrate that effective impact investments largely compare with the returns earned with traditional asset-class strategies. In particular, "**Essentials of Impact Investing**"[4] and "**Evolution of an Impact Portfolio: From Implementation to Results**" are beneficial and informative resources.

Investment strategy applied across asset classes—Impact investing is a portfolio strategy that can be applied across multiple asset classes, which is a relatively new development in the impact investing sector (e.g., cash and cash equivalents, fixed income, real assets, public equities, private equity and debt, structured notes). For many years, the only option for new impact investors was to make direct equity investments into private startups. **Section 3.2** provides a sample asset allocation framework.

Impact measurement—As recognized by GIIN, a hallmark of impact investing, is a commitment to measure and report the social and environmental performance and progress of underlying investments. Impact considerations must be taken into account during the:

a. Due diligence process to validate the potential impact of an investment

b. Term sheet development to make sure the managers are all in alignment around impact

c. Growth of the investments to monitor increased impact

d. Exit of an investment to quantify sustainable impact

See **Section 2.0** for more details on defining and measuring impact.

1.3 INTENTIONALITY: GOING BEYOND NEGATIVE SCREENS

The following impact investing spectrum, enhanced recently by Sonen Capital (and developed earlier by sector thought leaders GIIN, WEF, G8, and several others), defines approaches of investment management based on the level of impact that exists in an impact portfolio. Five categories of impact are defined below, moving (left to right) from lower to higher impact.

Traditional Investing	1. Responsible Impact Investing	2. Sustainable Impact Investing	3. Thematic Impact Investing	4. Impact First Investing	5. Philanthropy
Competitive Returns	ESG Risk Management	ESG Opportunities	Maximum-Impact Solutions		
Seeks financial returns regardless of Environmental, Social or Governance (ESG) factors	Investments are screened but based on ESG risk	Sustainability factors and financial returns drive investment selection	Targeted themes and financial returns drive investment selection	Social and environmental considerations take precedence over financial returns	Financial returns disregarded in favor of social and environmental solutions
	Negative Screens: Tobacco Alcohol Weapons Gambling Pornography Nuclear Energy	**Factors Considered:** Carbon footprint Resource use Waste reduction Compensation Product safety Gender equality	**Solutions For:** Carbon footprint Resource use Waste reduction Compensation Product safety Gender equality	**Support For:** Innovation & Risk Taking Proof of Concept/Pilots Enabling Environments Commercial Capital Leverage	

TABLE 1 - Credit: Sonen Capital

The five categories of impact investing are as follows:

1. Responsible Also known as Socially Responsible Investing (SRI), this approach involves the negative screening of investments due to conflicts or inconsistencies with personal or organizational values, non-conformity to global environmental standards, adherence to certain codes of practice, or other such binary impact performance criteria. The term 'Responsible' is also used to capture investment activity that might proactively contain a social or environmental component in its strategy.

2. Sustainable Sustainable investments move beyond a defensive screening posture, actively looking for investments that are positioned to benefit from market conditions by integrating environmental, social, and governance (ESG) factors into core investment decision-making processes.

3. Thematic Thematic or mission investments have a particular focus on one or more impact themes, such as clean water or preventing deforestation, and work to channel investment allocations in those particular directions. These are highly targeted investment opportunities, in which the social or environmental benefits are fully blended into the value proposition of a commercially positioned investment.

4. Impact First Impact-first investments have at the core of their value proposition the goal of intentionally seeking to optimize a desired social or environmental outcome, often in priority over financial return goals.

These categories, while useful, still leave too many uncertainties for impact-focused investors. For example, do responsible investments, which are based on the avoidance of certain investments rather than positive investment focus, qualify as part of a 100% impact investing portfolio? And because potential financial returns are not considered in any of these categories, how is an impact investor or portfolio manager supposed to set expectations for returns?

5. Philanthropy Philanthropy plays a critical role in the spectrum of capital available to impact-focused enterprises and programs. Philanthropy such as grants can often serve as 'starter capital' to catalyze new innovations before they are ready for investment capital.

When moving from grants (Philanthropy) to investment capital (Impact First category), many actors within the impact field accept a partial return of their mission-aligned capital and define it as a necessary and seamless piece of impact investing. These mission-aligned instruments, often in the form of program-related investments (PRIs), grants, or 'first loss guarantees,' are crucial in situations where layered or blended capital is used to manage-down inherent risk in the financing. A layered or blended investment structure allows the combination of capital with different return expectations to be applied in the same investment over time, or even within the same financing round.

That said, The Total Portfolio for Impact strategy does NOT focus on philanthropy. It demonstrates how to receive a financial return on investment that goes beyond negative screens and focuses EXCLUSIVELY on the sustainable, thematic, and impact-first categories, to ensure intentional impact.

1.4. A FRAMEWORK FOR BLENDING IMPACT INVESTMENT CHOICES ACROSS ASSET CLASSES

Although there are various ways to approach asset allocation,[6] **the following blend of asset classes provides an example of how to create a portfolio of direct and fund investments that**

1) balance impact performance and financial risk;
2) return a majority of invested capital within seven years; and
3) yield a small amount of near-term income to investors.

The scope of this work did not include an assessment of public equity, as this asset class is primarily used in Environmental, Social and Governance (ESG) and socially responsible investment strategies. The focus of the Total Portfolio Activation for Impact strategy is to push beyond ESG.

The following Asset Class table provides more detail as to why each was chosen and the corresponding investment method. Cash can be deposited in checking, savings, or money-market funds, which provide full transparency regarding their deployment and impact. The focus on fixed-income investments lowers the overall financial risk of the portfolio while delivering best-in-class impact. Both direct and external fund investments in real assets ensure maximum impact and a reasonable financial return. Finally, direct investments using structured notes, private equity, and private debt allow managers and advisors to stay as close as possible to their investments and concentrate on intentional impact.

Asset Class	Investment Method	Portfolio Purpose
Cash and Equivalents	Checking, savings, or money-market funds that seek social/environmental gain, e.g., via Community Development Finance Institutions (CDFIs)	Financial: Liquidity Risk: Low Impact: Moderate to High (local)
Fixed Income	External private and public debt funds issued by government, corporations, financial institutions, and fund managers that address environment or social issues	Financial: Stable cash yield Risk: Low Impact: Moderate to High (global)
Structured Notes (including Impact Bonds)[7]	Mostly direct investments in social enterprises using alternative exit structures (i.e., Variable Payment Obligations), or investments into external private funds that provide capital to social enterprises with tailored return or unconventional exit structure	Financial: Intermediate duration (5 years +) tailor-made cash flow and redemption/exit Risk: Medium Impact: Moderate to High (global)
Real Assets	Direct investments into real estate or real assets, or investments in external private funds that address social and/or environmental issues (e.g., urban green housing)	Financial: Moderate to High return Risk: Lower correlated risk Impact: Moderate to High (global)
Private Equity and Private Debt	Direct equity and/or debt investments in social enterprises, or investments into external PE/VC funds often by themes (e.g., financial inclusion, empowering women, clean tech)	Financial: High return Risk: High risk Impact: Moderate to High (global)

TABLE 2

Examples of investments in each asset class:

Cash	• Community Bank of the Bay • Self-Help Federal Credit Union • MicroVest Short Duration Fund • Southern Bancorp
Fixed Income	• Triodos Microfinance Debt/Equity Fund • Sonen U.S. Core Fixed Income • Root Capital Sustainable Trade Fund • PowerShares Build America Bond Fund
Structured Notes	• BAC Small Medium Enterprise VPO Loan Fund 1 • Maya Mountain • Adobe Capital Structured Exits Fund • Iluméxico
Real Assets	• Ecosystem Investment Partners II • Sonen Capital Sustainable Resource Fund • EKO Green Carbon Fund • Lyme Forest Fund III
Private Equity and Private Debt	• Core Innovation Fund II • Elevar Equity Fund II • BioLite • FAIM

TABLE 3

The following diagram illustrates what level of impact (impact first, sustainable, thematic) can be obtained when investing in each of the asset classes listed above, showing a sample portfolio allocation by asset class and impact spectrum.

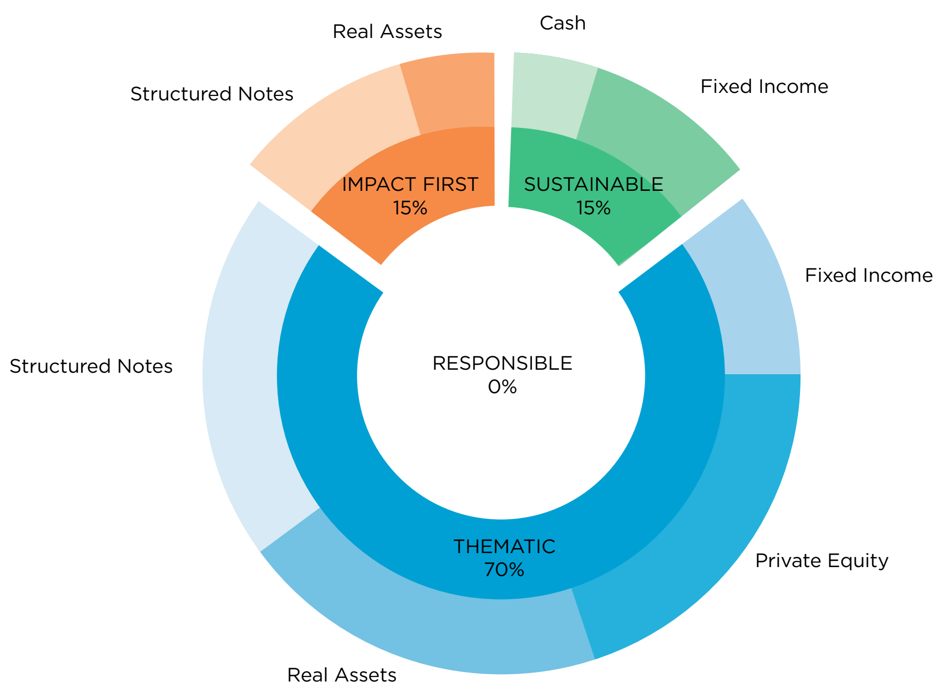


DIAGRAM 1

1.5 GEOGRAPHIC DIVERSIFICATION

Opportunities in the impact sector have emerged in similar proportion to Chart 2 below. Within each region, some countries are better sources of investment opportunities than others due to various factors, such as a ripe entrepreneurial and investment environment or political stability. **That said, investor interest, relevant experience, presence of deal flow partners/due diligence teams in country, the quality of investment targets, asset allocation, and the potential to realize competitive returns are far more important than adhering to specific geographic diversification.**

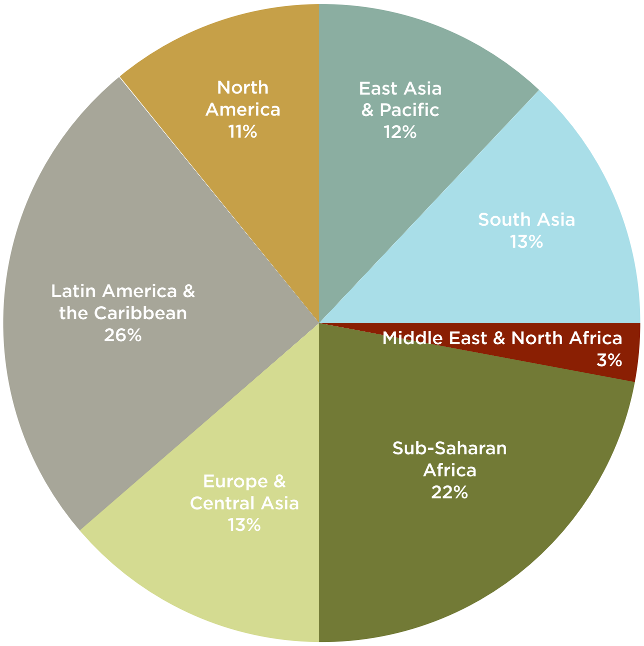


DIAGRAM 2 - Source: GIIN, Iris Data Brief (2013)

1.6 RELEVANT INVESTMENT THEMES

Certain investment themes lend themselves to an attractive and measurable amount of impact, as measured by beneficial outcomes to underserved communities or the preservation and sustainable use of natural resources. Some examples include:

- Sustainable Agriculture
- Water and Land
- Clean Energy
- Health Care
- Education
- Financial Services

Investments can be diversified across one or more themes, depending on the expertise of the investing team, focus of the investor, and sources of financing.

Examples of previous investments made in each of these thematic sectors are given below. Note: These examples do not indicate investment performance that the Total Portfolio Activation for Impact strategy could potentially achieve.

Sustainable Agriculture

Rationale

The world population is expected to surpass nine billion by 2050. According to the UN, feeding the growing population will require 70% more food than is currently produced.[8] Around 50% of the world's habitable land has already been converted to farming land, and overall, farmland covers 38% of the world's total land area — and this area is still expanding. It is predicted that in developing countries, a further 120 million hectares of natural habitat will be converted to farmland by 2050 to meet the demand for food.[9]

The global volume of food wastage is estimated at 1.6 billion tons of "primary product equivalents." Total wastage for the edible part of this food amounts to 1.3 billion tons — or, more than 140% of the increased demand for food that needs to be met. Our increasing demand for food necessitates more sustainable production and maintenance of existing land and water resources. This requirement will drive us toward a more resource-efficient, low-carbon economy and is expected to spur a variety of new investment opportunities in sustainable agriculture.

Types of Investments

Investments might be made in the following areas:

- Basic infrastructure that facilitates resource-efficient distribution of food and food products throughout the agricultural value chain and that can lead to reduced rates of food waste

- Products and technologies or processes that increase agriculture's resilience to climate change, reduce agriculture's relative contribution to climate change, and/or mitigate the sector's vulnerabilities related to resource scarcity

- Companies that practice environmentally sound management techniques that reduce costs, improve yield quantity and/or quality, and provide access to premium markets

- Companies that practice socially sound management techniques that improve worker health and productivity

- Companies that improve food security and employment, particularly for vulnerable populations

PHOTO CREDIT:
MAYA MOUNTAIN CACAO

Sample Capital Allocation

Examples of direct investments include:

- Structured notes investment in the form of self-liquidating debt in **Maya Mountain Cacao**, a company working with cacao farmers in Belize and Guatemala to improve quality, increase production, and bring greater prosperity to the communities

- Private equity investment in **FAIM**, which provides disease- and virus-free seedlings to significantly boost yields of various crops in East Africa

Examples of indirect investments include:

- Fixed-income investment in **Triodos Sustainable Trade Fund**, which provides trade finance loans to agricultural co-operatives and private companies operating in sustainable organic and fair trade agricultural value chains

- Fixed-income investment in **Impact Assets 'Sustainable Agriculture Note,'** a five-year private debt security that invests in grower cooperatives and agricultural enterprises promoting sustainable agriculture practices that improve environmental performance and build food systems while benefiting small to mid-sized farmers

Water and Land (including Timberland)

Rationale

Supply of water and land are likely to present the largest challenges to base-of-pyramid communities, given the rising global population. The McKinsey Global Institute estimates that "the annual pace at which [water and land] supply is added over the next 20 years... would have to increase by 140 percent and up to 250 percent, respectively, compared with the rate at which supply expanded over the past two decades."[10]

Globally, forest cover stores 283 billion tons of carbon. Deforestation and forest destruction is the second leading cause of carbon pollution, causing 20% of global greenhouse gas (GHG) emissions.[11]

For impact investment considerations, any environmental asset should also be, at the very least, neutral on a social impact scale.

Types of Investments

Investments might be made in the following areas:

- Increasing efficiency of water infrastructure by (a) targeting infrastructure investing that can demonstrably reduce waste, optimize distribution efficiency, and reflect local ecological concerns; and (b) investing in companies that are reducing water use and increasing water efficiency in operations

- Expanding innovations to increase water-use efficiency, reduce waste, and improve water quality by (a) investing in consumer- and industry-level tools that encourage efficiency, including meters and low-flow fixtures; (b) exploring market-based mechanisms of water rights and trading schemes that result in increased water conservation at scale; and (c) investing in treatment technologies that address a growing list of pollutants from industrial, agricultural, and human waste

- Increasing access to water and sanitation through urban and rural infrastructure by (a) providing financing to water infrastructure and distribution schemes that are located where incidence of water poverty are greatest, and (b) investing in technologies that provide low-cost solutions to purification and treatment and that can be widely adopted in poor, rural areas where water scarcity is acute

- Protecting and restoring land with high conservation value by (a) acquiring, protecting, and restoring lands, watersheds, and ecosystems with high conservation value, and (b) entitling land as mitigation banks:[12] engaging in water quality trading, transferring of development rights, and carbon sequestration

- Managing and preserving freshwater bodies and systems by strengthening the natural function of land-based ecosystems through conservation and restoration that increase drought resiliency, provide flood protection, and mitigate risks stemming from water-related natural disasters

Sample Capital Allocation

Examples of direct investments into enterprises include:

- Private equity investment in Water Health International, which develops and runs de-centralized WaterHealth Centers with water purification plants that provide safe and affordable drinking water to underserved populations in India, Africa, and the Philippines

- Real asset investment in Living Forest Communities, which invests in development of forestland into a conservation community of clustered home sites in Canada

Examples of indirect investments include:

- Real asset fund investment in **Lyme Forest Fund**, which focuses on the acquisition and sustainable management of lands with unique conservation values

- Real estate fund investment in **Beartooth Capital**, which invests in and manages ranch real estate to generate financial returns and positive conservation, agricultural, and community impact

- Natural resources fund investment in the **EKO Green Carbon Fund**, which develops innovative approaches to financing conservation and environmental sustainability with a focus on carbon, fisheries, green infrastructure, and water

- Natural resources fund investment in **Ecosystem Investment Partners**, which acquires, entitles, restores, and manages properties across the United States that generate credits for wetland, stream, and endangered species mitigation

- Private equity fund investment in **Aqua-Spark** (the Netherlands), which invests in sustainable aquaculture businesses that generate investment returns while creating positive social and environmental impact (Note: This fund has long-term investment horizons and thus carries a redemption option after five years.)

Clean Energy

Rationale

Global energy demand is set to grow by 37% by 2040, according to forecasts by the International Energy Agency (IEA).[13] Fast-rising energy demand will require some US$45 trillion in new infrastructure investment by 2030. This is an opportunity to build more efficient, less polluting, more flexible energy systems that are also less vulnerable to rising and volatile fossil fuel prices.[14]

The choices made in the next 15 years are also critical for the climate, as energy production and use already account for two-thirds of global GHG emissions. A large-scale shift to low-carbon energy supplies is crucial for avoiding levels of dangerous climate change.[15]

Over the past decade, distributed energy solutions such as biomass generators and photovoltaic sources for personal, home, and community-scale energy have become possible. In renewable energy technologies, efficiency and advanced energy technologies are helping to enable reductions in emissions.

Types of Investments

Investments might be made in the following areas:

- Increasing access and affordability of energy supply globally by investing in (a) technologies, financing, or distribution schemes that reduce incidences of energy poverty and focus on low-carbon solutions for the provision of power, particularly for communities in which such services are not reliable or do not exist; and (b) energy infrastructure—centralized or distributed—with a focus on renewable systems and grid extension that enable better social outcomes (e.g., education, economic productivity) and basic welfare (e.g., refrigeration)

- Innovation by investing in (a) applications related to energy storage and smart grid technology, including mini-grids and off-grid solutions; and (b) the development and use of lower-carbon energy generation

Sample Capital Allocation

Examples of direct investments include:

- Structured convertible debt investment in **PBK Waste Management Solutions**, which manufactures and sells household and small industrial composters in India

PHOTO CREDIT: BIOLITE

- Convertible debt investment in **BioLite**, which develops and manufactures advanced energy products that make cooking with wood as clean, safe, and easy as modern fuels, while also providing electricity to charge cell phones and off-grid LED lights

Examples of indirect investments include:

- Private equity fund investment in **Zouk Capital**, which invests in growth companies with proprietary, clean technologies that advance resource efficiency and generate renewable energy and environmental assets

Naya Jeevan is a Miller Center GSBI Alumni offering health insurance for the working poor.

Health Care

Rationale

At least 400 million people do not have access to one or more essential health services.[16] The overwhelming majority of these people are in the developing world, where leading causes of death still include preventable and treatable diseases such as heart diseases, tuberculosis, and diabetes.

An increasing number of innovations are emerging to tackle this problem, which are resulting in dramatically more cost-effective ways to conduct diagnosis, testing, and service delivery for health care. These include new health technologies, repurposing of existing technologies and infrastructure, new healthcare education approaches, improved healthcare products targeted to the needs and ability to pay of the world's poor, and innovations in the delivery of care. New approaches to healthcare financing (e.g., micro-insurance products and various risk-sharing arrangements) complement these innovations.

Types of Investments

Investments might be made in the following areas:

- Advanced telemedicine, mobile technologies, electronic medical records, patient engagement platforms, and managed care platforms

- High-quality and affordable diagnostic tools and services

- Companies that practice socially sound management techniques that improve worker health and productivity

- Healthcare service delivery/distribution models (e.g., increased efficiency, door-to-door services), and communications (e.g., remote/telemedicine, integrated cell phone communications)

- Healthcare finance

- Healthcare insurance

- Healthcare education to service providers, health professionals, and patients

Sample Capital Allocation

Examples of direct investments include:

- Equity investment in **Salauno**, which offers specialized eye-care (cataract surgeries) in Mexico.

- Private equity investment in **Naya Jeevan**, which offers 70 million working poor in Pakistan a way to gain affordable basic health insurance from private carriers

Examples of indirect investments include:

- Private equity fund investment in **Better Ventures**, which invests in technology startups building innovative solutions to solve big problems, in sectors ranging from work and education to health and sustainability

Education

Rationale

The role of education in promoting economic growth and social justice has long been recognized. For instance, one year of primary schooling boosts wages by 5% to 15%, while each year of secondary school increases wages by up to 25%.[17] The education sector is undergoing dramatic changes for a variety of reasons, such as the advent of new technologies (e.g., low-cost tablets); improved internet connectivity; rapid, localized content development; and increased interest of mobile telecom operators and data providers to engage customers more creatively and provide interactive learning solutions through technological applications.

Types of Investments

Investments might be made in the following areas:

- Increased access to education and educational content
- Improved educational materials, platforms, and content to instructors in underserved communities
- Technologies that lower the cost of vocational training, livelihood management, and economic resilience
- Platforms that dramatically enhance access to education for underserved populations

Sample Capital Allocation

Examples of direct investments include:

- Private debt investment in **ICT 4 Development**, which is providing mobile training centers in Kenya to educate more than 20,000 students on critical computer skills
- Private debt investment in **Formative**, which recently introduced a classroom tool for individualized student instruction and progress monitoring
- Few indirect (fund) investment opportunities exist today in education technology. As a result, it might be more feasible to seek direct investments in education technologies that are extensible to underserved communities and co-investment opportunities with other fund managers

PHOTO CREDIT: SANTA CLARA UNIVERSITY, ICT FOR DEVELOPMENT, KENYA

ICT for Development is a Miller Center GSBI Alumni in Kenya that has developed mobile training to reach underserved communities in East Africa.

Financial Services

Rationale

More than half the world's working-age population does not have access to high-quality, affordable financial services (**Global Financial Inclusion, McKinsey**). To better take advantage of life's opportunities and shield themselves from economic shocks, these underserved people and their households must be able to save, borrow, insure against risk, and make payments knowledgeably, safely, and affordably.

Furthermore, widespread use of mobile phones in emerging markets and digital transaction platforms has enabled the large-scale expansion of mobile financial services to underserved people, which is an investment opportunity.

Types of Investments

Investments might be made in the following areas:

- Mobile payment systems that serve the poor or unbanked
- Products and services that extend financial services throughout base-of-pyramid markets
- Microfinance funds that effectively promote livelihoods in underserved communities

Miller Center GSBI Alumni Kopo Kopo provides a suite of apps for payments and lending.

- Financial services that create economic resilience and defense against adverse events (e.g., crop insurance)
- Application of investments that create economic and social services for women
- Technologies that extend financial tools to underserved populations

Sample Capital Allocation

Examples of direct investments include:

- Direct convertible debt investment in **MPOWER Financing**, which works with investors and universities to lend to high-potential students who are not being served by traditional banks and other sources of student loans
- Direct equity investment in **Kopo Kopo**, which provides tools to facilitate mobile payments through existing platforms, focusing on merchant payments that enable small and medium-sized businesses to accept mobile money payments from their customers

Examples of indirect investments include:

- Cash equivalents and fixed-income fund investment in MicroVest, private-equity fund investment in **BlueOrchard Finance**, and fixed-income fund investment in **DWM Microfinance Funds**—microfinance funds that provide access to financial services for rising middle-class families and communities around the world

PHOTO CREDIT: ZATLETIC

2.0 WHAT IT MEANS TO HAVE IMPACT

2.1 DEFINING IMPACT

The Total Portfolio Activation for Impact strategy calls for the use of internationally accepted standards and methodologies such as IRIS (Impact Reporting and Investment Standards) and GIIRS (Global Impact Investing Rating System) where such use is possible and feasible.

IRIS is a common language for measuring the social, environmental, and financial performance of investments. It is an initiative of the Global Impact Investing Network (GIIN). Usually investors expect that IRIS definitions will be used by social enterprises for all quantitative impact metrics, and (potential) portfolio companies should be encouraged to do the same.

GIIRS is a system for assessing the social and environmental impact of companies and funds with a rating and analytics approach analogous to Morningstar investment rankings and Capital IQ financial analytics. Advisors and managers can look at GIIRS ratings—where available—as input for evaluating impact. Potential portfolio companies can be encouraged to complete the GIIRS ratings process.

It's also important to distinguish between outputs, outcomes, and impact.

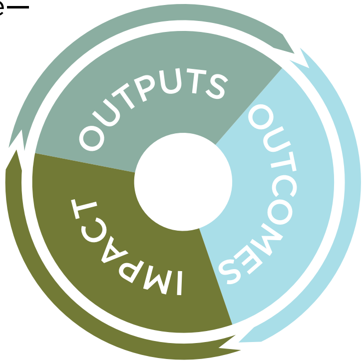


DIAGRAM 3

Outputs are quantifiable numbers of products and services that result from the activities undertaken by the investee. They can be measured with quantitative metrics. The strategy calls for the use of a very small set of core impact indicators across the portfolio. These core impact indicators should be complemented with sector-specific impact indicators for each investment theme. Some of the sector-specific metrics may need to be adjusted during the investment period.

Examples are:

- The number of low-income people treated at a health clinic
- Liters of drinking water purified
- Number of anti-malarial bed nets sold
- Number of students graduating from school

Outcomes are the observed changes or effects of the outputs on the clients of the enterprise or fund, or on the environment. Outcomes can be measured with quantitative metrics, qualitative metrics, and impact case studies—though they can be more difficult than outputs to measure quantitatively. Sometimes the observed outcomes might not actually be due to activity that is attributable to a specific investment. The objective is not to scientifically prove the causality of outcomes to investment activities.

Qualitative metrics and case studies—while in many cases anecdotal—contribute to the understanding of outcomes. In-depth case studies about portfolio companies, developments, and trends that underlie the quantitative metrics tell a more holistic story about the impact of investments. Many of the examples given below illustrate impact areas that create deeper beneficial outcomes. Their measurement and evaluation can be costly and will likely reduce net financial returns. However, an increasing number of investors move beyond ESG to achieve precisely these kinds of outcomes.

Examples are:

- 80% of patients treated experience improved physical well being
- 70% of clean water clients experience reduced incidence of diarrheal disease
- 50% of bed net clients experience fewer cases of malaria in the community
- 80% of participants show improved literacy rate
- 60% of rural population have 20% increased incomes
- 75% of clients have established savings accounts with more than one month's wages in deposited capital

Impacts are the long-term changes or effects on society or the environment that result from outcomes having been achieved. The strategy calls for measurement of impact with qualitative metrics and impact case studies. Impacts are very difficult to measure quantitatively.

Examples are:

- A healthier society
- Lower poverty rates
- Increase in full-time jobs
- Improved health of ecosystem and native species

The following sample outputs below can be measured for all of the investments in the Total Portfolio Activation strategy. The IRIS indicator codes are given in parentheses below, where applicable.

Type of Indicator	Sample Indicator
Output	Number of clients (either number of individual clients PI4060 or number of organization clients PI9652)
	The number of individual consumers or organizations served by the enterprise/investee (This measures only the direct beneficiaries of the portfolio company's product/service. While the number of indirect beneficiaries can be taken into consideration when assessing the attractiveness of investment opportunities, advisors/managers should not try to measure this, as the scope for interpretation by both the investor and the portfolio company is too wide and open for interpretation.)
	Jobs maintained (PI5691): Number of full-time equivalent employees working for the enterprises financed
	Number of permanent employees (OI8869)
	Number of temporary employees (OI9028)

TABLE 3

The Total Portfolio Activation for Impact strategy does not call for comprehensive measurement of outcomes and impact across the portfolio, but rather anticipates that it will use quantitative and qualitative metrics where available. Additionally, outcomes and impact should be measured where possible, and reported upon anecdotally and with case studies if quantifiable data is not available. Establishing a direct link between key performance indicators (KPIs) and beneficial outcomes is encouraged.

Attempts should be made to minimize negative environmental and social outcomes and impact—but this can be very difficult to do comprehensively due to the dearth of reliable data and lack of transparency.

The strategy calls for a focus on catalytic investments: those that cause or accelerate impact beyond the investment itself. Catalytic investments might inspire imitators, attract follow-on investments, lead to philanthropic and/or public support (where appropriate), or enable a geographical region, sector, or segment of the population that otherwise would not be enabled.

2.2 ASSESSING IMPACT BY INVESTMENT THEME

Illustrative outputs and outcomes that correspond with the investment themes outlined in **Section 1.6** are given below. If the indicator has an associated IRIS ID, it is noted in parentheses next to the indicator. This illustrative set of indicators is intended to serve as a resource to advisors and managers and is applicable across a portfolio; it is not an exhaustive list.

Sustainable Agriculture

Type of Indicator	Sample Indicator
Output	Total sustainable cultivated area or land sustainably managed (OI6912)
	Certifications (e.g., Sustainable Farm Certification International, USDA Organic Food Certification, Sustainable Agriculture Network principles, UTZ Certified Code of Conduct)
	Value of revenue from sales of certified products: fair trade, organic, or sustainable (PI7321)
	Producer price premium: units/volume purchased at price premium (PI2422)
	Average agricultural yield per hectare of clients (who were farmers) of the organization during the reporting period (PI3468)
	Water saving through sustainable operations or processes: water savings from products sold (PD5786)
	Land protected or conserved (if applicable): total protected land area (PI4716)
	Ecosystem services provided by the land, e.g., freshwater, climate regulation, habitat, nutrient cycling, water cycling (PD8494)
Outcome	Increase in aggregate value of directly exported production
	Increase in field-side or cooperative-level post-harvest production
	Adoption of international standards of measurement and product purity

TABLE 4

Water and Land (including Timberland)

Type of Indicator	Sample Indicator
Output — Clean Water	Number of unique client individuals who were served by the organization and provided access (PI2822)
	Volume of potable water provided and delivered to off-taker(s) (users of the water) (PI8043)
	Number of clients, individuals, or households who were served by the organization and provided access to products or services they were previously unable to access
Outcome and Impact — Clean Water	Percentage of clean-water clients experiencing reduced incidence of diarrheal disease
	Percentage reduction in labor hours lost from water-borne disease
Output — Mixed Land Use/ Timberland	Hectares of land reforested during the reporting period (PI4907)
	Area of land with a protected land status (PI4716)
	Area of land directly controlled by the organization and under sustainable cultivation or sustainable stewardship (OI6912)
	Area of land on which trees were planted (PI4127)
	Land reforested (PI4907)
	Area of protected land that shares a boundary with the organization's protected land (PI5750)
	Amount of the product/service sold by the organization as certified (PI7289)
	Value of the revenue from sales of the organization's certified products (PI7321)
Outcome — Mixed Land Use/ Timberland	Increase in farmers engaged in multi-season crop production

TABLE 5

Clean Energy

Type of Indicator	Sample Indicator
Output	Number of unique client individuals who were served by the organization and provided access (PI2822)
	Number of new clients, individuals, or households, who were served by the organization and provided access to products or services they were previously unable to access
	Amount of energy generated and sold to off-taker(s) (PI8706)
	Reductions in greenhouse gas (GHG) emissions over the lifetime of products sold (PI5376)
	Cumulative energy savings from products sold to end-users (PI7623)
Outcome	Percentage increase in local use of clean energy sources
	Territory or communities where clean energy products or sources become newly available

TABLE 6

Health Care

Type of Indicator	Sample Indicator
Outcome	Number of unique client individuals who were served by the organization and provided access (PI2822)
	Number of healthcare facilities under management (PI1017)
	Number of new clients, individuals, or households, who were served by the organization and provided access to products or services they were previously unable to access
	Number of unique poor individuals who were clients of the organization (PI3193) or very poor (PI9835)
	Health education and incentives for healthy living
	Access to medicines for low-income patients
Outcome	Decrease in disease rates
	Increase in affordability of health care and medicines and fair pricing
	Improved quality of care
	Improved health statistics for a given segment of the population

TABLE 7

Education

Type of Indicator	Sample Indicator
Output	Total number of students enrolled (PI2389); female (PI1081); poor (PI7254); very poor (PI5583)
	Number of schools
	Number of teachers (OI5896)
	School fees: average fee/student/month (PI2718)
	Student transition rate: Number of students advancing from one level to the next, a measure of school efficacy (PI4924)
Outcome	Percentage of students showing improved literacy rates
	Percentage reduction in school grade/age disparity
	Increase in access to educational programming

TABLE 8

Financial Services

Type of Indicator	Sample Indicator
Output	Number of unique individuals who are clients (PI4060)
	Number of women clients (PI8330)
	Type of financial institution, e.g., non-banking financial corporation, thrift bank, credit union, cooperative, etc. (OD9109)
	Microfinance delivery methodology, e.g., individual lending, solidarity group lending, self-help group lending, etc. (PD7356)
	The number of new businesses created as a result of investments (PI4583)
	Effective interest rate for the most representative loan product (PI7467)
	Social Responsibility to Clients: y/n policy (OI7783)
Outcome	Percentage of rural clients that have realized a consistent increase in income
	Percentage of clients that have established savings accounts with more than one month of living wages
	Percentage increase in financial products by small and medium-size enterprises, measured in monetary value

TABLE 9

PART TWO: How to Implement the Strategy

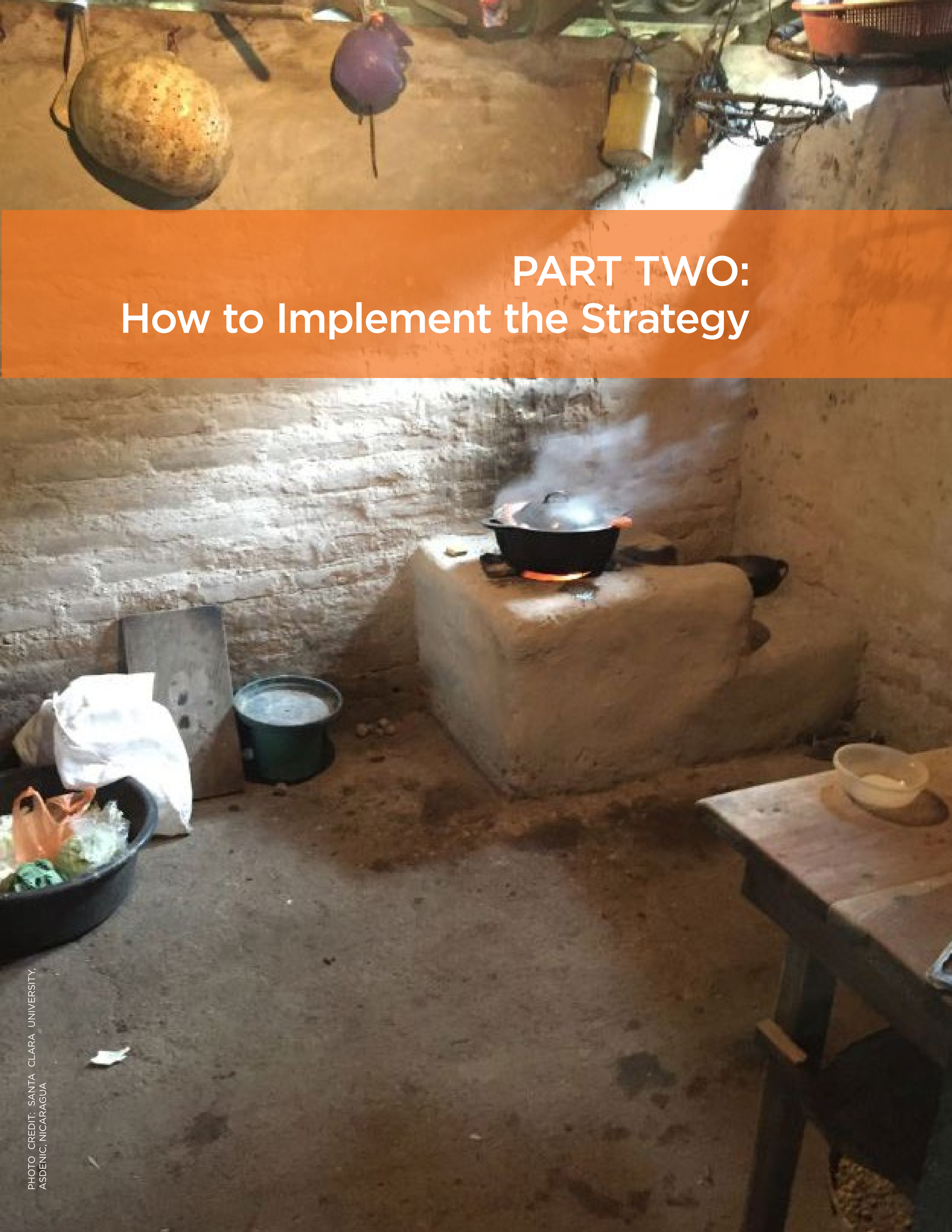


PHOTO CREDIT: SANTA CLARA UNIVERSITY, ASDENIC, NICARAGUA


PHOTO CREDIT: SANTA CLARA UNIVERSITY

3.0 THE TOTAL PORTFOLIO ACTIVATION FOR IMPACT STRATEGY IN ACTION: A MODEL PORTFOLIO

3.1 CONSIDERATIONS IN DEVELOPING A TOTAL PORTFOLIO ACTIVATION FOR IMPACT STRATEGY

In addition to adhering to the principles presented in **Section 1.2**, below are major themes that should be considered when developing a model portfolio:

- **The investor's mission and values**. Fund managers and investors must be clear about both their impact and their financial objectives prior to analyzing how the portfolio will be constructed and determining what investments to include.

- **Risk tolerance**. When calculating risk, the time horizon of an investment and the percentage of investment principal an investor is willing to lose in each investment must be taken into account. The portfolio asset allocation strategy needs to reflect the risk tolerance of the investor.

- **Local knowledge, insight, and partners** are critical for success—especially if the impact portfolio is assembled across cultures, economies, and jurisdictions. This consideration extends to fund managers and entrepreneurs that may be under consideration for investment. Many venture investors start their screening process with understanding the quality of the management team. Portfolio managers should, too.

- **Exit strategy**. How an investor will exit each investment is a consideration best addressed before funds are deployed. It has recently been a topic of high interest within the impact investing community. Often, the direct purchase of shares in a small company (equity investment) is not the best form of investment if there is only a faint prospect of a future public offering or acquisition. Instead, investment mechanisms using self-liquidating equity or 'structured exit' debt are being explored by direct investors, and fund managers are beginning to offer open-ended funds that allow investors to redeem their investment and gains after a defined holding period.

- **Post-investment assessment**. A further priority consideration in forming an investment policy and allocation is on post-investment support. This is especially true for investments seeking to create both financial value and positive impact. Investment opportunities break into low, medium, and high touch when considering the investor role post-investment:
    - Cash, fixed income, impact bonds, and most real asset funds are seen as low-touch obligations after investment.

- Private equity funds, direct real asset, and structured note funds can benefit from occasional investor participation and can be a source of follow-on direct investment opportunities. These assets are medium-touch investments.

- Direct investments—regardless of vehicle (debt, structured exit, or equity)—are high-touch, time-consuming portfolio components. Portfolio managers and fund managers are wise to consider the time and support requirements within the asset mix they map out. Syndication with other investors, especially those that are local to the investee, is often a good way to manage time commitment when making direct investments.

3.2 ALLOCATING INVESTMENTS TO BALANCE IMPACT AND RETURNS

The asset allocation within any portfolio will ultimately depend on the size of the portfolio, risk tolerance, and financial and impact requirements of the investor. For example, if the portfolio is under $25 million, it might not be possible to make a significant number of fund investments where Limited Partner minimums begin at $1-2 million. Also if the risk tolerance of the investor and the financial return requirements are high, the investor might choose to allocate a greater percent of capital to high-risk, high-return, direct private equity investments. If the investor is more risk-averse and prefers a more stable financial return, it might make sense to increase fixed-income investments. Please refer to **Section 1.6** to see the risk and impact characteristics of various asset classes.

The model portfolios below were constructed to create a balanced portfolio with high impact and high single-digit returns, with the following considerations informing the asset allocations:

1. Initial capital—whether it is a pool of cash allocated by a portfolio manager who is responsible for assembling a portfolio, or cash that is called down by a fund manager to be invested on behalf of limited partners—will dominate the target allocation for short-duration vehicles within the allocation strategy until opportunities surface to invest more broadly. Consequently, the target allocation must take into account the time-weighted nature of funds that initially come into liquid holdings and are later re-invested in longer-term direct investments, private equity, or real asset funds.

2. Certain investment vehicles can increase predictability of return. Three of these are in 'Structured Notes,' which consist of impact bonds, structured exit debt or equity, and financing for some real assets.

3. An 'allowable range' is essential for portfolio managers because of the highly uncertain timing of investment opportunities, capital growth while in the investment, and opportunities to exit. An allowable range is a target and must allow managers flexibility to practice (time-weighted) allocation without being so strict that it forces an unwise investment.

3.3 MODEL PORTFOLIOS

3.3.1 MODEL PORTFOLIO EXAMPLE 1: $25 million portfolio funded over 3 years with a 3-year investment period

The following table (Table 10) depicts the blend of asset classes, the target percent of the portfolio allocated to each asset class, and the allowable/expected return range for each asset class. The table below also shows the dollar amount allocated to each asset class.

Asset Class	Target Allocation	Allowable Range	Targeted Dollars
Cash & Equivalents	5%	2%-10%	1,250,000
Fixed Income	20%	15%-25%	5,000,000
Structured Notes (mostly direct investments)	35%	30%-35%	8,750,000
Real Assets:	25%	25%-30%	6,250,000
- Funds	5%		1,250,000
- Direct investments	20%		5,000,000
Private Equity:	15%	15%-20%	3,750,000
- Funds	10%		2,500,000
- Direct debt/ equity	5%		1,250,000
Total	**100%**		**25,000,000**

TABLE 10

The Total Portfolio Activation for Impact strategy is underpinned by a core holding in structured notes (35% of portfolio), mostly in the form of direct investments in enterprises. These investments are expected to yield high single-digit returns, but they often have a short investment cycle (typically three to five years) and can yield constant, stable quarterly or semi-annual cash returns.[18] This is supplemented by leveraging higher-return private equity instruments (15% of portfolio), paired with shorter-duration fixed-income and cash products (25% of portfolio), and high-return real asset (25% of portfolio) instruments that are less correlated with other instruments.

3.3.2 TABLE OF ANNUAL CASH FLOW AND YIELD

The following table (Table 11) shows the annual cash flow modeled for a $25 million pool of investment capital that is funded over three years and requires an investment period of three years. This projection is somewhat more conservative than a scenario where investment capital is immediately available and largely deployed in the first 18 months. A three-year deployment is most likely when available investment capital is being shifted over from other allocations or where a fund for impact investing has been raised and has a call-down schedule over a three-year period.

An example of a faster deployment of capital is projected in the Model Portfolio Example 2 section below.

	Year Ended	Net Annual Cash Flow (in USD)	Annual Yield (cash inflow/principal)
	2015	0	0
	2016	39,429	0.7%
	2017	265,737	2.4%
	2018	886,726	3.5%
	2019	1,708,726	6.8%
	2020	2,584,643	10.3%
	2021	4,128,188	16.5%
	2022	3,363,386	13.5%
	2023	3,155,577	12.6%
	2024	6,156,334	24.6%
	2025	36,331,834	145.3%
Total Net Cash Inflow		***58,620,611***	
Total Invested Capital		***25,000,000***	
Total Gross Return Multiple of Cash Inflow			***2.3x***
Total Gross IRR over 10 years of Cash Inflow			***8.9%***

TABLE 11

3.3.3 DRAW-DOWN SCHEDULE: A 3-YEAR INVESTMENT PERIOD

The cash flow table above assumes a *gradual capital draw-down schedule* from investors: $3 million in 2Q16, $3 million in 4Q16, $5 million in 2Q17, $7 million in 1Q18, and $7 million in 4Q18. Assuming capital can be deployed toward investments almost as soon as it is drawn down, there will be a three-year (e.g., 2016-2018) investment period. When returning cash flows are received from investment interests or exits, they are temporarily parked in cash accounts, ready to be immediately distributed to the Limited Partners (as in a fund) or re-invested by the portfolio manager.

	2016				2017				2018			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Draw Down Capital	-	**3,000,000**		**3,000,000**		**5,000,000**			**7,000,000**			**7,000,000**
Asset Allocation		**3,000,000**		**3,000,000**		**5,000,000**			**7,000,000**			**7,000,000**
Cash & equivalents		250,000	-	250,000	-	250,000	-	-	250,000	-	-	250,000
Fixed Income		2,500,000	-	2,500,000	-	-	-	-	-	-	-	-
Public Equity												-
Structured Notes		250,000		250,000		1,250,000			2,625,000			4,375,000
Real assets:												
- Real assets funds						500,000			750,000			-
- Real assets direct investments						1,300,000			2,000,000			1,700,000
Private equity:												
- Private equity funds						1,000,000			825,000			675,000
- Private equity direct debt/equity		-	-	-	-	700,000	-	-	550,000	-	-	-

TABLE 12

In the first year of the investment period (2016), all of the fixed-income investments are deployed (a total of $5 million), along with some structured note investments (first choices from an existing investment pipeline). In the second and third years of the investment period, when there is a solid pipeline for both fund and direct investments, investments in the structured notes, real assets, and private equity asset classes will ramp up. As noted earlier, some of the funds invested previously in cash, fixed-income, or structured notes might be re-invested in new, direct investment targets and funds to achieve portfolio allocation balance.

As shown in **Section 3.2**'s Table of Annual Cash Flow & Yield, the single-digit cash yield in the first three to four years of fund life reflects the return derived from the initial deployment of capital. As fixed-income and structured-note investments begin to yield steady cash flows, the cash yield increases to double digits in years five to nine of the fund. Finally, private equity and real asset funds are redeemed, yielding a triple-digit cash yield in the 10th year of the fund.

For fund managers, these considerations will have significant impact on initial versus average allocation, draw-downs, and ultimate performance of the fund. For portfolio managers, this indicates a back-end contribution by longer-term, higher-yield, higher-risk investments.

3.3.4 MODEL PORTFOLIO EXAMPLE 2: **Reallocating $50 million of existing investment assets into an impact portfolio**

Investment managers with responsibility over an existing portfolio can deploy capital much more swiftly, once a decision to adopt such a strategy has been taken. In this case, we modeled a series of investments, within the asset allocation ranges, that absorb up to $50 million. Beyond $50 million, a significantly different set of investment targets would need to be analyzed for investment risk and suitability.

Although reallocation of an existing pool of investment capital can happen more quickly, sufficient time to place the investments is still needed. The model anticipates an 18-month initial investment period. With faster deployment, rates of return improve to over 10.3% gross IRR. Some of the assets, such as fixed income, are unaffected by timing. Direct investments and some real asset investments benefit from an earlier start in the investment cycle.

Asset Class	Target Allocation Policy	Allowable Range	Targeted Dollars
Cash & equivalents	2%	2-10%	1,000,000
Fixed Income	21%	15%-25%	10,500,000
Structured Notes (all direct)	35%	30-35%	17,500,000
Real assets:	26%	25-30%	13,000,000
- Real Assets funds	5%		2,600,000
- Real assets direct investments	21%		10,400,000
Private equity:	16%	15-25%	8,000,000
- Private equity funds	11.2%		5,600,000
- Private equity direct debt/equity	4.8%		2,400,000
	100%		**50,000,000**

TABLE 13


PHOTO CREDIT: SANTA CLARA UNIVERSITY

4.0 DUE DILIGENCE

The goal of the investment process is to support the identification of high-quality opportunities, reduce risk, and create a diversified portfolio of impact investments. To achieve this, multiple screens must be used: Advisors/managers will need to filter for impact potential, financial attractiveness, and fit within the portfolio. Costs of developing investment opportunities and costs of diligence put upward pressure on management fees or staffing costs for investors. Sharing these costs are, in part, why investor 'collectives' such as **Investors' Circle**, **PYMWYMIC**, and Toniic have formed.

As discussed, a variety of investment instruments can be used, including structured exits and social impact bonds. Each will carry its own imperative on the due diligence process. For example, priorities in conducting diligence on a fund manager will center on:

- Manager experience
- Track record
- Unique approach to the defined portfolio strategy
- Legal and regulatory investigation

In contrast, diligence priorities for a direct investment in an enterprise will center on:

- Management team business model
- Financial viability
- Execution risk
- Exit strategy

An investment committee, typically comprised of fund managers and key stakeholders, should approve the formation of an investment policy and the resulting broad asset allocation strategy—revisiting the asset allocation strategy along with direct and indirect investment ratio, annually.

INVESTMENT PROCESS ROADMAP

Investment Team Review	Portfolio Managers Review	Third-Party Due Diligence Review
Sourcing & developing pipeline of social enterprise and impact fund	**Preliminary approval** by Investment Committee	**In-country due diligence** by consultants (e.g., Beyond Capital)
Initial due diligence: Portfolio fit assessment via proprietary risk-return-impact methodology, developed at Santa Clara University's Miller Center for Social Entrepreneurship	**Full Due Diligence:** PMs engaged in on-site assessment, relationship management	**Periodic reporting of Social Impact & Financial Return** to Investment Team & PMs
Recommendation to **Investment Committee**	Working with **Investment Team** to further **portfolio construction**	
Portfolio construction		

DIAGRAM 4

4.1 GENERAL METHODOLOGY

The first step in the strategy's diligence process is the establishment of a standardized assessment methodology. This methodology facilitates the comparison of funds and underlying managers, thus simplifying the investment decision process.

The following flow chart (Diagram 4) describes the major factors that were considered during the diligence process exercised in designing the Total Portfolio Activation for Impact strategy. It is provided as an example.

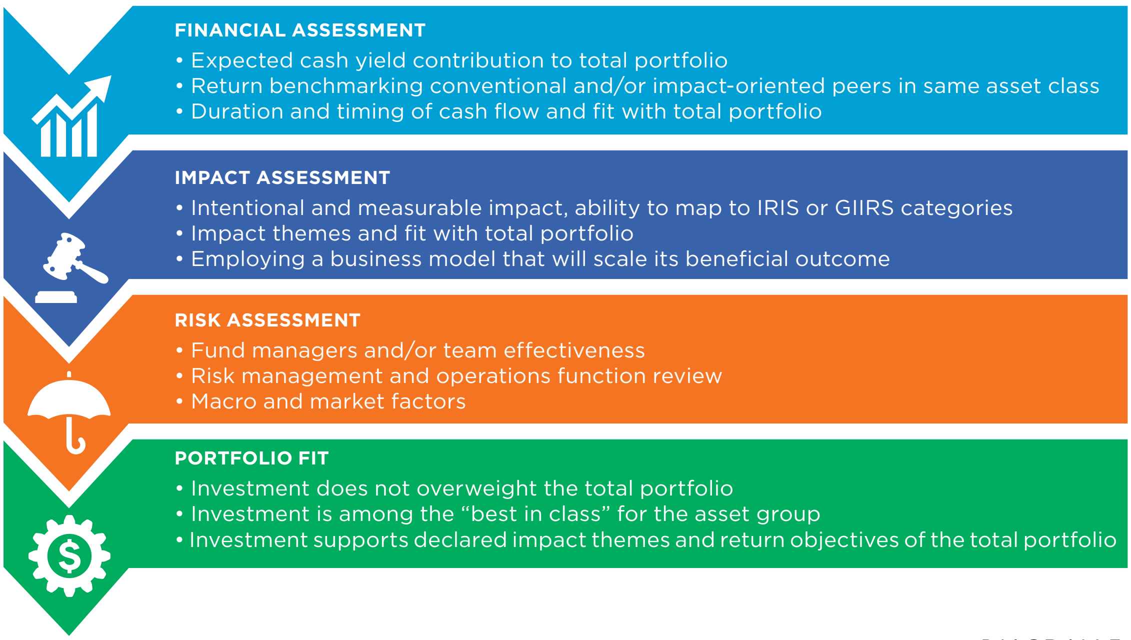


DIAGRAM 5

When the strategy is implemented, the initial due diligence process would provide metrics for ongoing quarterly assessments for shorter-duration investments made, with assessments conducted at least semiannually for longer-term holdings.

It's also important to note that the due diligence process differs significantly for funds compared to direct investments.

4.2 DUE DILIGENCE FOR FUNDS

Modern Portfolio Theory (MPT) describes an "efficient frontier" as the set of optimal portfolios that offers the highest return for a defined level of risk. From the efficient frontier concept, important modern theories of security valuation, asset allocation, and portfolio diversification have come into being. However, MPT assumes a two-dimensional framework of risk and return.

Impact investors have introduced a third variable, one of impact, to the traditional framework of risk and return. This is based on the notion that all investment options have positive and negative impacts on society and the environment.[19]

Some practitioners and researchers have suggested that having a positive impact dilutes return. This line of thinking still corroborates MPT in that a two-dimensional framework of risk and return is maintained.

In the analysis conducted for the model portfolio, impact is a neutral factor. As more studies begin to show, impact may or may not have an effect on return. Public companies that adhere to Environment, Social, and Governance (ESG) standards, for instance, showed more evidence of positive financial performance than neutral-negative financial performance.[20]

Rather than debating the possible financial trade-off between the inclusion of impact and ultimate financial return,[21] each potential investment evaluated for the model portfolio was assessed based on a trio methodology of risk, return, and impact. A score from zero to five was given for a variety of measures we chose to include. Every investor, portfolio manager, and/or fund manager will develop their own weighting and scoring system. Our criteria and tri-axis scoring system is provided only for purposes of illustration.

CRITERIA FOR FUND EVALUATION

The following criteria were considered when evaluating fund-level investments:

- Investment thesis (fund description, summary of opportunity, portfolio position)
- Investment theme
- Impact (quantitative or qualitative, with time horizon)
- Expected return and duration
- Key factors affecting return (macroeconomic, strategic, operational)
- Financial benchmarking
- Risks (quantitative, qualitative)
- Fund manager evaluation (including track record)
- Manager experience
- Previous track record
- Governance (protections, participation, reporting)
- Other participating investors

Not all criteria were equally relevant for all investments. For example, management track record and references were important considerations for an external fund investment, but quantifiable duration and credit risk were important considerations for short-term fixed income investments.

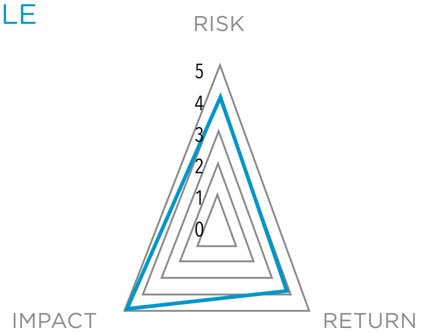
METHODOLOGY

The three-way fund assessment methodology used to construct this model builds on earlier research published by J.P. Morgan.[22] In the assessment methodology, all investment options are depicted in a tri-axis space comprising its unique risk score, return score, and impact score.

The target allocation policy required a blended portfolio return of high-single-digit internal rate of return (IRR) that also generated moderate-to-high impact and low overall risk. This preferred combination forms a unique plane in the tri-axis space. Thus, any investment option was assessed against this plane of scores for portfolio fit and provided a form of objective comparison.

The following example depicts this methodology being used to compare two sustainable trade funds. The Total Portfolio Activation for Impact strategy team assigned the scores:

<table>
<tr><th>Fund A Sustainable Trade Fund</th><th>Fund B Sustainable Trade Fund</th></tr>
<tr><td>Risk assessment score: 3.9 out of 5.0
Financial return score: 3.5 out of 5.0
Impact score: 4.8 out of 5.0

FUND RISK-RETURN-IMPACT PROFILE

</td><td>Risk assessment score: 3.8 out of 5.0
Financial return score: 3.8 out of 5.0
Impact score: 4.3 out of 5.0

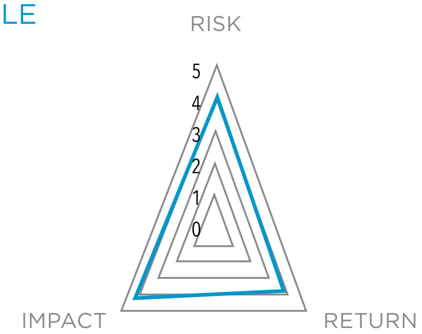
FUND RISK-RETURN-IMPACT PROFILE

</td></tr>
</table>

DIAGRAM 6

RISK ASSESSMENT

The risk assessment process evaluated factors such as fund or team effectiveness, fund or team risk management and operation functions, credibility of track record, execution risk, and other macro factors. **Each factor was further assessed by several sub-factors and summed up with a weighted score**.

The following is an example of a risk assessment on an impact fund:

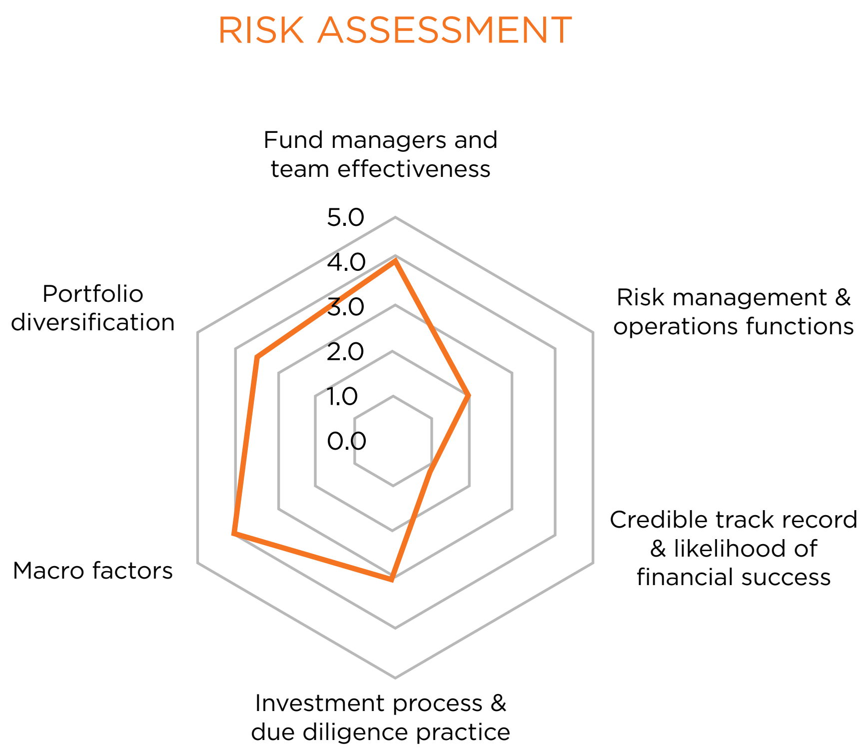


DIAGRAM 7

In this particular example, the Miller Center analysts scored six different risk factors for an impact portfolio assembly. Although this particular fund management team had worked effectively together, they had no previous track record as fund managers. Scoring for 'team effectiveness' was high (4 out of 5) but scoring for 'credible track record' (1) and 'risk management & operations' (2) suffered. 'Macro factors' earned a high score (4) because of management's unique access to attractive investment opportunities. 'Investment process' and 'portfolio diversification' relative to the overall portfolio construction earned meaningfully positive scores (3 and 3.5, respectively) from the analyst team.

We would emphasize that consistency in risk scoring elements and process is very important to achieving a fair comparative analysis across similar investment opportunities and will be a benefit to investment committee consideration.

FINANCIAL RETURN ASSESSMENT

Financial return was assessed in light of the asset class of the investment. It was then benchmarked to conventional investment products or to a comparable social impact index. For instance, Core Innovation Fund II, an impact private equity fund that invests in domestic financial institutions, was measured against the Cambridge Associates US Venture Capital Index with the same vintage (starting year). It was also measured against the newly compiled Cambridge Associates' Impact Investing Benchmark, which is a benchmark comprising 51 private impact investment funds.[23] Root Capital's Sustainable Trade Fund, a private fixed-income fund that invests in sustainable, rural agricultural businesses, was measured against the BarCap Aggregate Global index over the same investment period.

The following is a list of benchmarks that the strategy used in each asset class:

Cash & equivalent	U.S. 30-day T Bill
Fixed Income	BarCap Global Aggregate Bond index
Structured Notes	Cambridge Associates US Venture Capital Index, or Cambridge Associates Impact Investing Benchmark
Private Equity	Cambridge Associates US Venture Capital Index, or Cambridge Associates Impact Investing Benchmark
Real Assets	NCRIEF indices (e.g., Timberland) Dow Jones UBS Commodity index

TABLE 14

In assessing the prospect of an investment's financial return, the overall return enhancement or "drag" to the model portfolio expected aggregate return was also taken into consideration. Financial returns that fell short of the target return received a lesser mark, but were not the only determinant.

IMPACT ASSESSMENT

In assessing the impact potential of a fund or enterprise, three key factors were taken into consideration:

- Fund or company impact thesis and strategy
- Clarity of impact indicators and measurability
- Impact monitoring and data management capabilities

Each of these factors might also have a subset of factors that sum up to give a weighted score. Each portfolio manager will have his or her own chart of sub-factors that can be easily added to this kind of impact assessment. It is up to the discretion of the asset manager to deem which factors are appropriate in their evaluation. Investment options were not considered that did not yield at least a moderately high impact score (at least 4.0 out of 5.0).

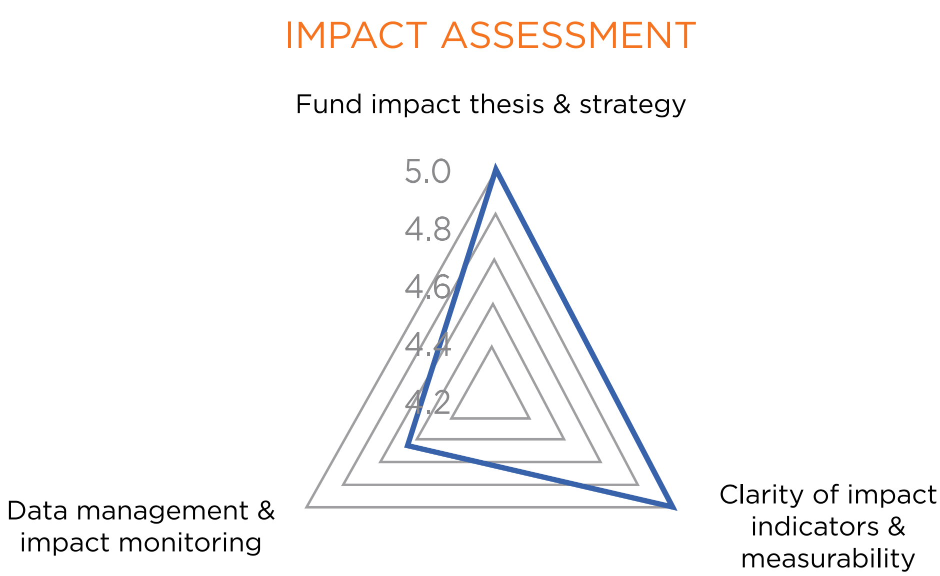


DIAGRAM 8

4.3 DUE DILIGENCE FOR DIRECT INVESTMENTS

When constructing the direct investment portfolio, preference was given to investment targets that were syndicated with other investors, and follow-on investments into established companies chosen from the portfolios of existing funds. The latter is also a way to source more mature direct investment opportunities and thus mitigate risk.

Each investment manager will have his or her own style for implementing process against direct investment targets. We would note that, especially in frontier markets, perfect information is not available.

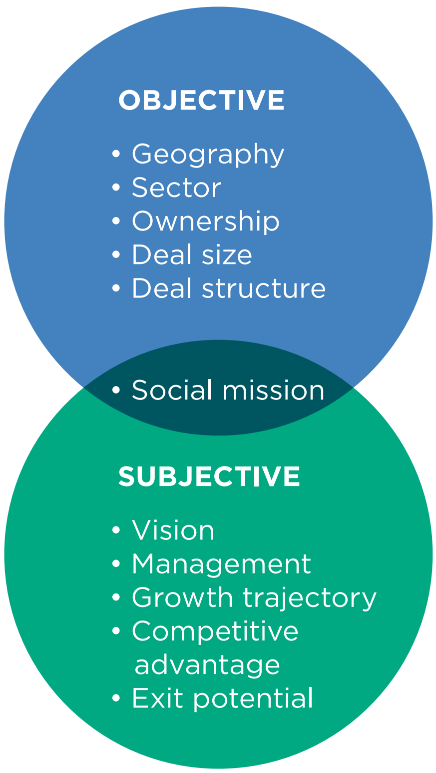


DIAGRAM 9

The diligence done for investment targets used in this report met reasonable standards but was by no means exhaustive. Examples of diligence reports we generated are contained in the Appendices 5.0.

The graphic shown here depicts some initial focus areas, separated into subjective and objective considerations. Social mission (impact) is shown in both places as both a fact of company mission and subjectively valued by a prospective investor.

We would also note that a majority of direct enterprise investments modeled in the strategy utilize structure-exit financing. This has a profound effect on portfolio assembly in the direct investment portion of a broad asset allocation. It also has a significant effect on diligence. Unlike an equity-centered portfolio where the investment manager is assembling a basket of high-risk, high-return-potential investments, structured exit financing places a premium on cash flow and profitability, not on achieving high valuation multiples. Diligence processes must correspondingly reflect this emphasis on financial performance. This 'change of lens' seems to suit a majority of enterprises found in the impact field, which are usually intentionally limited in their market reach and growth prospects.

4.4 OTHER DUE DILIGENCE CONSIDERATIONS

Asset managers are responsible for setting asset allocation targets and selecting portfolio holdings. Allocations displayed in this strategy paper are illustrative in nature. The managers are asked to recommend or approve all investments. Additionally, the managers need to anticipate that all investments are reviewed at least semiannually.

The investment committee is expected to review asset allocation periodically. The committee also reviews any single investment (individual security) that is greater than 5% of total fund capital commitments.

While the investment committee's role in approving individual investments is limited, if the committee feels strongly about an issue (expressed with a unanimous vote), the managers are expected to seriously consider its views.

No single investment should exceed 10% of the fund's capital commitments unless formally approved by the investment committee. In addition, the committee takes country risk into consideration, particularly where foreign exchange fluctuations occur and/or market risk is volatile.

The extent to which fund managers and internal staff can complete due diligence depends on how the fund portfolio is constructed (e.g., number of technical areas, geographic regions, and asset classes selected). If a small fund is being raised (under $50 million), limiting the scope of the fund simplifies the due diligence process and reduces staffing costs. However, depending on the technical expertise of the staff, managers can retain external advisors to perform due diligence. For example, while a given fund may have internal expertise in fixed-income investing, most social impact bonds have unique local characteristics. In that case, the fund might also rely on local experts for advice.

Direct investments in real assets are also expected to require some external diligence. And while direct private equity investments are expected to be undertaken as part of a syndicate, the managers can augment diligence with local expertise. Fund managers might also want to hire a fund advisor to advise them on portfolio construction, provide access to certain investments on its platform, and provide due diligence services such as investment research, verification, and legal review.

The managers are expected to compile an internal database of contacts. On the fixed-income end of the investment spectrum, these contacts are likely to be institutions: banks, funds, or investment houses offering certificates and notes. On the real asset/private equity end of the spectrum, these contacts are most likely to be accelerators, direct investment funds, or organized investment networks.

As the risk or complexity of an investment increases, the managers are expected to invest as part of a syndicate or fund, with the goal of improving deal flow and diligence quality while moderating risk.

If starting a new fund, asset managers can consider setting up a limited partnership in the LP/GP structure. Such a structure usually has both an advisory board made up of key participants of the limited partnership and a separate investment committee, drawn from key members of the impact investing community, traditional VC/PE community, other independent fund investors, and potentially staff from universities.

PHOTO CREDIT: SANTA CLARA UNIVERSITY, RANGSUTRA

5.0 APPENDICES

5.1 SAMPLE FUND TERM SHEET

Ideally, individual portfolio managers or advisors bringing relevant investment and impact sector experience would build close relationships with accomplished in-country fund managers, accelerators and other capacity-building intermediaries, local VC/PE associations, and key players in the impact investment community such as **ANDE**.

That said, deal flow partners for direct investments could include organizations such as Toniic (an impact investment syndication network), Investor's Circle, Endeavor, Sonen Capital, and impact accelerators such as Miller Center's Global Social Benefit Institute (GSBI®), Village Capital, and Hub International.

To include allocation to public securities, there are many sources of preconfigured socially responsible and ESG investments. These include the USSIF forum for sustainable and responsible investment.[6]

Note: This is a sample of a term sheet used in a venture financing. There are many additional terms which can be added and the terms set forth herein are not meant to represent the "standard" but rather as an example of the types of terms found in such financings.

ABC, INC.

May ___, 20xx

MEMORANDUM OF TERMS FOR A PRIVATE PLACEMENT OF SERIES A PREFERRED STOCK

Proposed Private Placement

ABC, Inc. (the "Company"), proposes a private placement of shares of the Company's Series A Preferred Stock (the "Series A Preferred") on the following terms:

Amount:	$__________.
Participants and Funding:	_________ and ________ (collectively, the "Investors").
Purchase Price:	Per share purchase price of $0.50.
Conversion Rate:	Each share of Series A Preferred shall initially be convertible into one (1) share of Common Stock, subject to adjustment in the case of events described below.
Anticipated Closing Date:	May ___, 2005.
Rights, Preferences, Etc., of Preferred Stock:	(1) Dividend Provisions. The Series A Preferred shall be entitled to dividends of 8%, when and if declared by the Board, in preference to the holders of Common Stock. For any additional dividend or distribution, the Preferred Stock shall participate with the Common Stock on an as-converted basis. (2) Liquidation Preference. In the event of any liquidation or winding up of the

Company (including a merger or sale of substantially all of the assets), the holders of Series A Preferred shall be entitled to receive, in preference to the holders of Common Stock, an amount equal to 1X per share, plus accrued and unpaid dividends (the "Preference Amount"), with "X" being the original issue price of the Series A Preferred, as adjusted (see (5) below). If assets and funds are insufficient to pay all such Preference Amounts, then the assets and funds available will be distributed ratably to the holders of Preferred Stock, in proportion to the product of the liquidation preference of each such share and the number of such shares owned by each holder. Any amounts remaining after payment of the Preference Amounts will then be distributed ratably to the holders of Preferred Stock and Common Stock ratably on an as converted to Common Stock basis.

(3) Conversion.

The holders of the Preferred Stock shall have the right to convert the Preferred Stock, at the option of the holder, at any time into shares of Common Stock of the Company.

(4) Automatic Conversion.

All Preferred Stock shall automatically be converted into Common Stock upon the earlier to occur of (a) the closing of an underwritten public offering with aggregate proceeds of at least $________, provided that the valuation of the Company is at least $________ and (b) the vote or written consent of at least a majority of the Preferred Stock then outstanding.

(5) Anti-Dilution Provisions.

Proportional adjustments will be made to the Preferred Stock conversion price for capital reorganizations, stock splits, dividends, reclassifications, etc. The Series A Preferred shall have weighted average price protection for issuances below the Conversion Price then applicable to the Series A Preferred, excluding the issuance after the Closing Date of: (a) Common Stock issued upon conversion of Preferred Stock; (b) options to employees, directors, consultants, advisors, suppliers, vendors and customers approved by the Board of Directors or an authorized committee thereof; (c) Common Stock issued pursuant to licensing agreements or arrangements or strategic partnership agreements which are approved by the Company's Board of Directors or an authorized committee thereof; (d) Common Stock issued to lenders, lessors, headhunters or public relations agencies in transactions which are not primarily for the purpose of equity financing, upon approval of the Board of Directors; (e) Common Stock issued as a dividend or distribution on the Preferred Stock or (f) Common Stock issued upon approval of the holders of a majority of the Series A Preferred as to any adjustment to the Series A Conversion Price.

(6) Voting Rights.

a. General Voting. The holders of Series A Preferred shall have the right to that number of votes equal to the aggregate number of shares of Common Stock issuable upon conversion of such holder's shares.

b. Election of Series A Director. There shall be a total of three directors. The Series A Preferred shall elect one (1) director so long as at least __________ shares of Series A Preferred remains outstanding. The holders of Common Stock shall elect two (2) directors. The holders of Common Stock and Preferred Stock, voting as a single class, shall elect all remaining directors.

(7) Protective Provisions.

Approval of holders of majority of outstanding shares of Preferred Stock necessary (i) to amend, alter, or repeal the Company's Certificate of Incorporation in a manner which adversely affects the rights of the holders of Series A Preferred, (ii) to authorize, create or issue shares of any class or series of stock with a preference over the Series A Preferred as to dividend rights or redemption rights or liquidation preferences (issuance of a *pari passu* security shall not be deemed to trigger these provisions) or (iii) to increase or decrease the authorized number of shares of Series A Preferred.

Purchase Agreement: The investment shall be made pursuant to a Purchase Agreement reasonably acceptable to the Company and the

	Investors, which Purchase Agreement shall include standard representations and warranties and conditions of Closing reflecting the terms of this Memorandum.
Registration Rights:	(a) Cover Common Stock issuable upon conversion of Series A Preferred Stock. (b) Two demand registrations; at least 50% to request with minimum of $________ to be sold; demand cannot be made before the earlier of (i) three (3) years after the Closing Date and (ii) one (1) year after the IPO. (c) Piggyback rights, with underwriter cutbacks (full cutbacks in an IPO but not below 15% of the Shares in subsequent registrations). (d) S-3s for $1,000,000 transactions if the Company is eligible, but no more than one per year and no more than three (3) total. (e) Company pays usual registration expenses (including reasonable fees of one counsel for the selling stockholders, except in case of S-3 negotiations). Company shall pay expenses for first two demand registrations and for first Piggyback registration. (f) Normal indemnification.
Market Stand-off Agreement:	If requested by the Company and its underwriters, no Investor will sell shares for the 180-day period following the effective date of the Company's initial public offering to the extent that (1) all officers, directors and other 5% stockholders enter into similar agreements.
Information Rights:	The Company shall deliver to each Major Investor (holder of at least 200,000 shares): (i) annual consolidated balance sheets and (ii) quarterly unaudited consolidated balance sheets. When the Company becomes subject to the reporting requirements of the Securities Exchange Act of 1934, the Company will provide each Major Investor copies of its annual reports on Form 10-K and its quarterly reports on Form 10-Q, and these information obligations

shall otherwise terminate.

Expenses:	Irrespective of whether the closing is effected, the Company and the Investors shall each bear their own legal and other expenses with respect to the transaction.
Finders; Brokers:	The Investors and the Company shall each indemnify the other for any finder's fees for which either is responsible.
Transfer of Rights:	All of the rights in the transaction documents may be transferred to (i) a transferee or assignee of not less than ________ shares, (ii) a transferee or assignee of two percent (2%) of the Company's Common Stock from a Founder or (iii) a transferee or assignee acquiring all of the Registrable Securities originally sold to an Investor pursuant to the Purchase Agreement; provided, that the Company is given advance written notice thereof, such transferee agrees in writing, in a form acceptable to the Company, to be bound by the same obligations and agreements as the transferor and such transfer complies with applicable state and federal securities laws.
Aggregation:	For purposes of determining the availability of any rights under the transaction documents, all shares of the Series A held by or acquired by affiliate entities or entities under common investment management shall be aggregated together.
Amendment:	The transaction documents shall provide that they may be amended and the observance of any term may be waived, only with the written consent of the holders of at least a majority of the Series A then outstanding.

The purpose of this Memorandum of Terms is to express the mutual intent of the parties hereto to proceed in good faith and as expeditiously as possible towards consummation of the proposed transaction on such terms and conditions. This summary does not constitute the legally binding agreement of any party to consummate the proposed transaction on the terms and conditions contained herein. The final and binding agreement of the parties shall be contained only in the definitive documents.

[Remainder of this page intentionally left blank.]

This Memorandum may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument. This Memorandum shall expire at 5:00 p.m. Pacific Time on ____________, 2005, if it has not been signed by Investor and returned to the Company.

INVESTOR:

____
Print Name of Investor

Proposed Investment Amount: $__________

By______________________________________
(Signature)

____
Print Name (if signing on behalf of an entity)

____
Title (if applicable)

Date: ____________, 2005

ACKNOWLEDGED:

COMPANY:

ABC, INC.

By______________________________________
Print Name_______________________________
Title____________________________________
Date: ____________, 2005

5.2 DUE DILIGENCE TEMPLATES

IGNITE FUND DUE DILIGENCE TEMPLATE

FUND NAME, THEMATIC

Analysts:			
Date written:			
Manager & Fund Information			
Firm Name		**Fund Status**	
Fund of Interest		**Asset Class**	
Geography/ Region Focus			
Impact Investment Profile			
Category in Spectrum:		Impact Theme(s):	
Areas of Impact:		Subsectors:	
Impact Outcome & Output Goals:			

Impact	High Impact			
	Moderate Impact			
	Lower Impact			
Relative Return & Risk		Below Market Rate	Market Rate	Above Market Rate Return
Description (Investment Thesis)				

Fund Structure & Terms			
Fees p.a.		Minimum commitment:	
Fund size:		Firm Assets	
Fund Inception:		Firm Inception:	
Target Return:		Financial Benchmark:	
Term:		Investment Period:	
Carry:		Fund Close:	

Fund Manager & Team Information				
Tenure of Fund vs. Fund Manager:				
Fund	New			Description:
	Existing			
Fund Managers		New	Existing	
The following is the Asset Manager's team:				

General Partner.
Principal.
Investment Manager.

DISCLAIMER: THE IGNITE FUND IS A PRO FORMA, CONCEPT FUND.

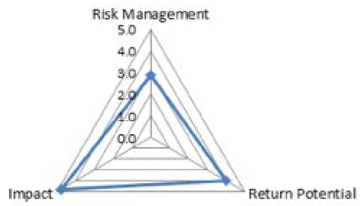
IGNITE FUND DUE DILIGENCE TEMPLATE

FUND NAME, THEMATIC

Investment Associates.			
The following is the Asset Manager's investment criteria			
Investment Stage:		Preferred Instrument:	
Investment Size:			
Investment Diversification & Limitations:			
The following describes a Sample Target Investment of the Asset Manager.			
Underlying Investment/ Company Description & Financing Need:			
Asset Manager's Headquarter			
Address:			
Contact:		Telephone:	
Email:		Website:	
Location:			
Executive Summary			
Investment Thesis			
Overview			
History & Business Model Investment Vehicles & Exit Mission & Leverage			
Investment Opportunity			
Fund Strengths			
Fund Concerns & Mitigating Factors			
Market Overview			
Investment Process			

Scoring Methodology & Analysis - Fit with Ignite	
We recommend three factors to assess: Risk management, return potential, and impact. The analyst should assess as many sub-factors as appropriate within each factor. Each sub-factor can be further broken down into other weighting criteria.	
Assessment Categories	
Risk Management Score	**2.9**
Return Potential Score	**4.0**
Impact Score	**4.8**

Fund Risk-Return-Impact Profile

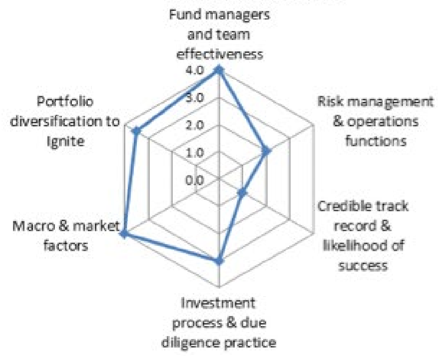


Risk, Financial Return, and Impact Strategy Assessment	
Risk Score	**2.9**
Fund managers and team effectiveness	4.0
Risk management & operations functions	2.0
Credible track record & likelihood of success	1.0
Investment process & due diligence practice	3.0
Macro & market factors	4.0
Portfolio diversification to Ignite	3.5
Sample Risk Assessment scoring:	

IGNITE FUND DUE DILIGENCE TEMPLATE

FUND NAME, THEMATIC

Risk Assessment

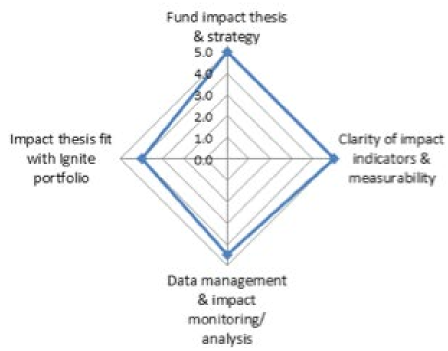


Financial Return Score	**3.25**
Expected net financial return vs. peers	4.0
Return Enhancement to Ignite Portfolio	2.5

Impact Score	**4.8**
Fund impact thesis & strategy	5.0
Clarity of impact indicators & measurability	5.0
Data management & impact monitoring/ analysis	4.5
Impact thesis fit with Ignite Portfolio	4.0

Sample Impact Assessment scoring:

Impact Assessment



Due Diligence Notes & Meeting Schedules:

Confidential – for internal use only

Page 4

Beyond Capital Fund

Due Diligence Template

Note: The below Due Diligence Template is re-formatted for presentation purposes. In original form, these materials are presented to the Beyond Capital Fund Due Diligence Committee and Investment Committee in alternative formats, and supplemented by significant additional analyses and discussion.

Introductory Stage Diligence Materials: "Show and Tell"

EXECUTIVE SUMMARY
[Company name and logo]
Situation
Problem
Solution
Value Proposition
Competition & Barriers to Entry
Risks
Contact

Show and Tell Template	
Company	
Founded	
Launched	
Founders capital	
Grants	
Seed (Raising Now)	
Series A	
Series B	
Awards & Recognitions	
Notable Backer(s)	
What does the Co. do?	
Industry	
What is the social impact the Co. is trying to achieve?	
What social impact metrics and outcomes is the Co. tracking and how are they tracking them?	
What is the primary revenue source? Secondary sources?	
What is the Co's differentiator(s)?	
Market size	
Target audience(s)	
Strategic partnership(s)	
Location(s) currently? Location(s) contemplated?	
Management team assessment	
Proof of concept notes	
Market traction notes	
Last 12 mo's revenues	
Liquidity outlook	
Purchase environment	
Macroeconomic considerations	
Behavior required by end-user	
End-user required capabilities	
Images	

DDC Discussion Items	
Recommendation:	
Open Questions:	
Key Issues for the Group:	

Stage 2 Diligence Materials: "Threshold Analysis"

Overall Recommendation – a presentation outline, supplemented by significant additional analyses and discussion.

Criteria	Summary
Social Impact and Market Needs	
Management	
Business Model	
Competitive Analysis	
Scalability	
Investment	

Fundraising Questionnaire

Preamble: Beyond Capital Fund invests exclusively in for-profit social enterprises. Our investment philosophy and mission drive us to find businesses that are improving the quality of life and standard of living for consumers at the Bottom of the Pyramid using financial instruments that will yield market rate financial returns. As such, our dual mandate means: (1) we expect entrepreneurs will not sacrifice the financial integrity and sustainability of a business, (2) our investments will not be "concessionary" in nature (i.e., the motivation to achieve impact will not require us to sacrifice the appropriate risk-adjusted level of expected return), and (3) whether or not we lead a financing round, we expect to agree to terms we deem appropriate, rather than simply accept terms agreed upon by other investors (particularly if other co-investors accept concessionary returns).

Company's Name: [] Date of Questionnaire: []

Type of entity: []

Item	Comments
Please attach cap table showing all equity holders (with vesting information), including debt holders if debt is convertible to equity.	[]
Describe prior fundraising rounds, if any (when, type of security, amount raised, number of investors, valuation).	[]
Please list all current investors in the company (cash only, not services exchanged for equity).	[]
Please describe current state of fundraising activity (amount seeking, investors interested/committed, prospective terms, type of security). If you have received a term sheet, please attach.	[]
Please list your aggregate expenses and revenues for the most recently completed calendar year and the current year to date.	[]
Describe your timeline for your current fundraising efforts.	[]
Please attach your use of funds, including major outlays and expenditure priorities.	[]
Please outline the number of months expected to be funded by the fundraise (i.e., "runway") and the month-by-month expense and revenue projections (on an aggregate basis).	[]

Later Stage Materials: Investment Committee Diligence Summary "Punchlist"

Please check off the following diligence milestones and provide the relevant detail and context in support pages.

Company Name: ___________________

CEO: ___________________

Total fundraise: ___________________

BCF funding commitment: ___________________

DDC materials presented: ___________________

Existing investors: ___________________

Lead investor: ___________________

Co-investors: ___________________

Primary industry: ___________________

Primary country of operations: ___________________

In a sentence, what does the Company do?

- ☐ Do we have a clear understanding of the social impact to the BoP?
- ☐ Have we met the CEO in person?
- ☐ Have we met any other management team members in person?
- ☐ Have we met / spoken with all crucial Company managers?
- ☐ Are we comfortable with management pay and incentives to stay with Company?
- ☐ Are we comfortable with growth plan and ability of management team to execute?
- ☐ Do we feel comfortable knowing the 2-3 most important metrics to Company success?
- ☐ Do we know expected future fundraising needs?
- ☐ Have we performed a legal review of any major contracts or investment term sheets?
- ☐ Is CEO living in-country?
- ☐ Is CEO from the country of focus?
- ☐ Have we spoken to other co-investors, if any?
- ☐ Have we checked management team references and spoken with vendors/suppliers?
- ☐ Can BCF provide "Beyond Capital" support? If so, what?
- ☐ Is there a term sheet drafted? If so, which entity has proposed the terms?
- ☐ Have BCF's deal term preferences been communicated?
- ☐ Are we comfortable with the valuation?
- ☐ If investment instrument is a convertible note, does the note have a valuation cap?
- ☐ Are we comfortable/ have we discussed expected exit opportunities?

									Geographic Distribution of Investment Target				
Asset Class (% allocation)	**Impact Category**	**Net expected return (p.a.%)**	**Sustainable Agriculture**	**Water & Land**	**Clean Energy**	**Health Care**	**Education**	**Financial Services**	**North America**	**Latin & Central America**	**Africa**	**Central & SE Asia**	**Europe**
Cash & Equivalents (5%)													
Bank Deposits*													
- Self Help Federal Credit Union CDs	Thematic	1.05%						Yes	100%				
- Community Bank of the Bay	Thematic	0.75%						Yes	100%				
Social Money Market Funds (5%)													
- MicroVest Short Duration Fund	Thematic	3.25%						Yes	7%	32%	4%	57%	
Fixed Income (20%)													
PowerShares Build America Bond Fund (3%)	Sustainable	4.7% (yield alone)		Yes	Yes				100%				
Bamboo Finance Hybrid Fund (5%)	Thematic	6%-8% yield	Yes		Yes			Yes		20%	40%	40%	
Root Capital Sustainable Trade Fund (3%)	Thematic	2.25%-2.75% yield	Yes			Yes		Yes	Not disclosed	60%	39%	1%	
Triodos Microfinance Hybrid Fund (5%)	Thematic	5.5%						Yes					
Etc.													

5.3 MAPPING OF PIPELINE INVESTMENT FUNDS AND COMPANIES BY IMPACT THEME AND GEOGRAPHY

To construct the model for $25 million and $50 million portfolios, the funds and companies that met the qualifications as outlined previously were assessed and mapped by impact theme, expected return per annum, and geography, as depicted in the table above (not all impact themes are listed here due to space constraints).

Asset Class (% allocation)	Impact Category	Net expected return (p.a.%)	Sustainable Agriculture	Water & Land	Clean Energy	Health Care	Education	Financial Services	*Geographic Distribution of Investment Target* North America	Latin & Central America	Africa	Central & SE Asia	Europe
Structured Notes (35%)													
Maya Mountain Cacao (1%)	Thematic	13%**	Yes			Yes		Yes		100%			
BAC VPO Fund I (5%)	Sustainable	8.0%-11% yield**						Yes		100%			
DajDaj Pelene (1%)	Impact First	9%**				Yes							100%
Other VPO direct deals (10%)	Impact First/ Thematic	Target 8%-12%**						Yes		TBD, likely 100%			
Other VPO Funds (i.e. Columbia) (18%)	Sustainable	Target 8%-12%**						Yes		TBD, likely 100%			
Private Equity/VC (15%)													
BioLite (1.5%)	Impact First***	8%			Yes				Not disclosed				
PBK Waste Management (2%)	Thematic	8%			Yes							100%	
Food Stand (1.5%)	Thematic	6%	Yes						100%				
Core Innovation Fund II (10%)	Thematic	15%-20% net IRR						Yes	100%				
Real Assets (25%)													
JP Morgan Urban Renaissance Fund (2%)	Thematic	15% net IRR		Yes			Yes		100%				
Lyme Northern Forest Fund (3%)	Thematic	11.6% net IRR	Yes						100%				
Direct timber investment (TBD)	Thematic	14% yield	Yes						TBD, likely 100%				

*Bank deposits: No specific investment is allocated to 'bank investments'; rather, we park cash with CDFIs only in specific instances, such as the initial receipt of LP cash prior to investment deployment, the temporary storage of investment yields and exits waiting to be distributed to LPs, etc.**Maya Mountain Cacao's 13% IRR is based on 2x return over 5.5 years. DajDaj Pelene's 9% IRR is based on 1.4x return over 3.5 years. BAC VPO Fund I return is an estimated net yield of 8% to 11% to investors per year. Other VPO direct or fund deals are estimates, based on comparable terms and returns achieved by the likes of Maya Mountain Cacao and BAC VPO Fund I.

***BioLite is an Impact First investment, per KL Felicitas Foundation.

5.4 RESOURCES FOR TOTAL PORTFOLIO ACTIVATION FOR IMPACT INVESTMENT OPPORTUNITIES

GUIDE

Arabella Advisors, Exponent Philanthropy, & Mission Investors Exchange; Essentials for Impact Investing; September 2015

Yasemin Saltuk – JP Morgan; A Portfolio Approach to Impact Investing; October 20126

PUBLICATION

Julia Balandina Jaquier | Guide to Impact Investing – For Family Offices and High Net Worth Individuals | June 2016

REPORT

Dear, Helbitz, Khare, Lotan, Newman, Sims, & Zaroulis – Social Finance; Impact Bonds – The Early Years; July 2016

RS Group; Impact Report; May 2016

Miller – Heron Foundation; Building a Foundation for the 21st Century; January 2016

Drexler & Noble – World Economic Forum; Impact Investing: A Primer for Family Offices; December 2014

Update: Balbuena, Morgan, Newman, Pun, & Pomares – Sonen Capital; Evolution of an Impact Portfolio: From Implementation to Results; December 2015

> *Original Report:* Lai, Morgan, Newman, & Pomares – Sonen Capital; Evolution of an Impact Portfolio: From Implementation to Results; October 2013

Palandjian - Bridges Ventures & Parthenon Group; Investing for Impact – Case Studies Across Asset Classes; January 2010

WHITE PAPER

Asset Allocation Working Group; Social Impact Investment Taskforce – UK G8 Presidency; Allocating for Impact; September 2014

Electris, Humphreys, & Solomon – Tellus Institute; Tides & Trillium Asset Management; Total Portfolio Activation – A Framework for Creating Social and Environmental Impact across Asset Classes; August 2012

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Endnotes

1. Report on U.S. Sustainable, Responsible, and Impact Investing Trends 2014, 10th Edition; **http://www.ussif.org/Files/Publications/SIF_Trends_14.F.ES.pdf**

2. **https://www.missioninvestors.org/system/files/tools/Essentials-of-Impact-Investing-A-Guide-For-Small-Staffed-Foundations-Arabella-Advisors-Exponent-Philanthropy-Mission-Investors-Exchange.pdf**

3. The Global Impact Investing Network (GIIN) is a nonprofit organization dedicated to increasing the scale and effectiveness of impact investing. The GIIN's programmatic agenda is rooted in the challenges faced by investors, and it serves as a forum for identifying and addressing the systemic barriers that hinder or impede the impact investing market.

3. **http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf**

4. Arabella Advisors, Exponent Philanthropy, & Mission Investors Exchange; Essentials for Impact Investing; September 2015

5. Lai, Morgan, Newman, & Pomares – Sonen Capital; Evolution of an Impact Portfolio: From Implementation to Results; October 2013

6. Although public equities can potentially be included, they were not part of this asset allocation strategy.

7. 'Structured Exit' financing describes investment vehicles that have recently emerged to fund social and environmental impact. These investment vehicles are used where traditional debt does not carry enough risk premium, and equity does not present a plausible mechanism for investment return. While there are several versions of structured exit vehicles, the core concept is to agree with the investee on how investment capital and profit will be returned to investors as a share of revenue or earnings until a total return amount has been achieved. This approach has several advantages for the impact investing sector. It eliminates a need to define valuation; puts an emphasis on reliable cash flow and profit growth; does not require the entrepreneur to sell the enterprise; is flexible in its construction; and carries equity-like protective provisions.

   Social Impact Bonds are tools to finance government pay-for-success contracts. Investors provide up-front funding for a program of prevention or early intervention services that are currently beyond the reach of limited government funding. If the program hits performance targets and saves the government money, government uses some of the savings to repay investors with interest. If the program fails, government owes the investors nothing. Many times philanthropic capital or interested corporate funds play a critical role in mitigating the risks of the investors. Intermediary organizations provide ongoing

performance management and project oversight throughout the life of the investment. We would note that non-government sponsors of Social Impact Bonds are also beginning to participate.

8. **http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf**

9. **http://wwf.panda.org/what_we_do/footprint/agriculture/impacts/habitat_loss/**

10. **http://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/resource-revolution**

11. **https://us.fsc.org/en-us/what-we-do/why-forests-matter**

12. **https://www.epa.gov/cwa-404/mitigation-banking-factsheet** (Definition of mitigation banking from EPA)

    A conservation or mitigation bank is privately or publicly owned land managed for its natural resource values. In exchange for permanently protecting, managing, and monitoring the land, the bank sponsor is allowed to sell or transfer habitat credits to permit holders who need to satisfy legal requirements and compensate for the environmental impacts of developmental projects.

13. **http://www.iea.org/publications/freepublications/publication/WEO_2014_ES_English_WEB.pdf**

14. **http://2014.newclimateeconomy.report/energy/**

15. **http://2014.newclimateeconomy.report/energy/**

16. WHO/World Bank Group, “Tracking Universal Coverage” (2015)

17. Open Society Institute, 2010, “Innovative Financing for Education,” ESP Working Paper No. 5. London: Open Society Institute

18. Note: sometimes these returns start after an initial honeymoon period.

19. Total Portfolio Activation, Tides Foundation, 2012
    https://www.tides.org/fileadmin/Publications/Total_Portfolio_Activation_01.pdf

20. The Performance of Socially Responsible Investment, AP7, 2011
    http://www.gruenesgeld.at/downloads/The-Performance-of-SRI.pdf

    Shedding Light on Responsible Investment: Approaches, Returns, and Impacts, Mercer, 2009
    http://www.law.harvard.edu/programs/lwp/pensions/conferences/cm_europe12_09/Shedding_light_on_responsible_investment_free_version.pdf

21. Trade-off between financial return and impact: Earlier reports published by the impact investing community suggest there may be a trade-off between financial gains and impact, that is, for every incremental impact achieved, there is an incremental dilution to financial returns.

22. A Portfolio Approach to Impact Investment, J.P. Morgan, 2012 **http://www.jpmorganchase.com/corporate/socialfinance/document/121001_A_Portfolio_Approach_to_Impact_Investment.pdf**

23. Introducing the Impact Investing Benchmark, Cambridge Associates, 2015 **http://40926u2govf9kuqen1ndit018su.wpengine.netdna-cdn.com/wp-content/uploads/2015/06/Introducing-the-Impact-Investing-Benchmark.pdf**

Santa Clara University

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