



Real Assets

Investing for Impact



The ImPact is a membership network of family enterprises (family offices, foundations, and businesses) that are committed to making investments with measurable social impact. The ImPact provides families with the knowledge and network they need to make more impact investments more effectively, and uses sophisticated technology for data aggregation, analysis, and reporting to shift the narrative of impact investing from one of inputs (dollars committed) to outcomes (impact created). Our purpose is to improve the probability and pace of solving social problems by increasing the flow of capital to investments generating measurable social impact.

REAL ASSETS AND IMPACT INVESTING:

A PRIMER FOR FAMILIES

Real assets can create tangible, enduring impact. By investing in affordable housing, green buildings, and sustainable land management, families can generate positive, physical change in communities they care about most.

Several ImPact member families are using assets they already own, such as family farms or real estate companies, to create measurable social and environmental impact. Other families are making new impact investments in real assets as part of their general asset allocation. Real asset investments are particularly well-suited for investors whose impact objectives include supporting underserved communities, enhancing resource efficiency, or improving sustainable food and fiber systems.

The purpose of this primer is to explore various real asset impact investing strategies families use to achieve their overall impact and financial objectives. This document is intended to be exploratory and not a source of investment advice.

Key Characteristics:

Here are some key characteristics of real asset impact investments:

Lower Correlation with Other Asset Classes

Changes in the value of real assets tend to have a low correlation with other asset classes, particularly public equity. Due to this low correlation, real assets can provide a stable retention of financial value in volatile economic times and diversify a financial portfolio. By integrating social and environmental considerations into real asset investment decisions, families can often further reduce their portfolios' risk and volatility.¹

Hedge Against Inflation

Real assets have physical value. In times of inflation, real assets can provide protection against the decreasing value of a currency as their physical nature retains its fixed—or sometimes increasing—worth. In countries with immature financial markets and volatile currencies, real assets can provide stores for substantial capital. Impact investors in real assets may find that the sustainable practices they incorporate into

the ownership of their physical assets (e.g. timberland, grassland, green buildings, etc.) improve the long-term value retention of their asset and grow their value over time.

Predictable Cash Flows and Long-Term Capital Gains

Certain kinds of real asset investments, such as farmland, timberland, grassland, and real estate can generate predictable cash flows (e.g. rent or harvest sales). In addition to regular cash flows, these assets may be sold for long-term capital gains. Sustainable management practices can improve both the short-term and long-term yields of real assets. For example, LEED-certified buildings can produce long-term cost savings and command higher rents and sale prices.

Illiquid, Usable, and Enduring

Real assets are illiquid investments. Most families who make real asset impact investments expect a relatively long-term investment timeline—many families anticipate

Real Assets are physical assets that are valued for their intrinsic or inherent qualities.

Examples of real assets include real estate, agricultural land, and precious metals. Real assets are considered part of the “alternative investment” asset class. Investing in real assets can offer:

- ☑ Portfolio diversification due to low correlation with other asset classes
- ☑ Inflation hedge
- ☑ Stable cash flow and long-term capital gain
- ☑ Tangible, enduring impact on the environment and in local communities



Real asset impact investments provide families a physical, experiential alignment of their values and their investments.

multigenerational or “perpetual” ownership of farms, timberland, or buildings. These assets generally create impact through the way that they are used or managed. Certain assets, such as ecologically managed timberland, create social or environmental value by their very existence, independent of changes in their financial value. Though real assets are exposed to the risk of catastrophe—a fire can devastate a forest, an earthquake can destroy affordable housing—their impact can be insulated from financial market risk, making them uniquely attractive investments for long-term impact investors.

Principle Motivations for Making Real Asset Impact Investments

We see three key motivations driving families to make real asset impact investments:

Values Alignment

Real asset impact investments provide families a physical, experiential alignment of their values and their investments. Real assets differ from financial assets in their tangibility. Existing owners of legacy real assets such as family farms or ranches may be particularly sensitive to the impact and sustainability considerations of these investments as they hold deep personal meaning for the family. New real asset impact investments are particularly well suited for investors with strategies that focus on place-based or process-based impact (e.g. environmental protection or sustainable food supplies) as real assets offer those investors tangible opportunities to pursue their impact objectives.

Social and Environmental Impact Drive Long-Term Outperformance

Families may find that optimizing the social and environmental impact of their real asset investments can reduce operating costs and ensure greater long-term viability of their assets. For example, green buildings (e.g. LEED-certified or BREEAM²-designated) are more resource-efficient than conventional buildings, which can produce dramatic cost savings to owners or managers. In turn, reduced operating costs incentivize buyers to purchase green real estate, increasing market demand for green buildings. Several studies have shown that green buildings outperform their non-green peer assets in key areas such as occupancy, sale price, and rental rates—sometimes by large margins.³

Using Business to Address Specific Social and Environmental Challenges

The utilization of real assets relates directly to critical social and environmental challenges such as climate change, food security,⁴ and the growing demand for affordable housing—the physical land, fiber, food, and buildings that contribute to, or mitigate, those challenges are all investable real assets. Impact investments in real assets have the potential to improve the availability and longevity of natural resource systems as well as help ensure a basic, affordable standard of living for those in our communities and around the world who are underserved.⁵

Real Assets Impact Investment Opportunities

Impact Investing in the Built Environment

Impact investments in the built environment (i.e. investment in physical buildings) can generate place-based or people-based impact, including: the creation of housing for underserved populations, the inclusive revitalization of an economically stagnant

community, and the construction or retrofitting of energy efficient buildings.

Affordable Housing and Community Revitalization

Global demand for affordable housing and community real estate investment is growing rapidly. According to United Nations projections, the world's cities will add approximately 1.5 billion residents in the next 15 years, and 3 billion by 2050.⁶ Impact investors are mobilizing to meet this growing demand. One example is Eytan Stibbe, a successful entrepreneur with strong business experience in sub-Saharan Africa, whose Vital Capital Fund is invested in a company called Kora Housing in Angola. Kora builds affordable housing, recreational spaces, and healthcare and education centers for low-income communities; all of Kora's developments are built close to quality employment opportunities for residents.⁷ Vital Capital fund anticipates market-rate returns alongside scalable, sustainable impact.

In certain countries, tax credits may further incentivize family investors who choose to invest directly in affordable housing, such as the Low Income Housing Tax Credit in the United States and a similar tax credit program in France.⁸

Beyond affordable housing, other families are making impact investments in commercial real estate designed to support inclusive economic development in devitalized communities. Family-funded social innovation hubs, coworking and "makerspaces," and flexible, mixed-use developments are emerging in urban areas around the world, designed to breathe new economic life into previously distressed areas.

Green Buildings

The resource intensity of buildings creates an urgent need and opportunity for families to invest in sustainable real estate. Buildings account for 40 percent of global energy consumption and 30 percent of



CO2 emissions,⁹ and major players in the real estate industry are beginning to recognize the growing environmental and regulatory¹⁰ risks to which they are exposed. Green buildings worldwide comprise a market that is over \$260 billion with anticipated growth of 13 percent per year through 2020.¹¹ The "mainstreaming" of green real estate is helping to push sustainability improvements in Real Estate Investment Trusts (REITs)—publicly-traded companies that own and operate income-producing real estate. Investments in sustainable REITs and ESG-screened real estate funds can help families improve the impact of their investment portfolios while maintaining portfolio liquidity.



Impact Investing in the Natural Environment

Impact investing in the natural environment (i.e. investing in land and water) can ensure responsible management and stewardship of natural resources, improved ecological health, and the sustainable enhancement of ecosystems in which assets exist.

Timberland

Timberland has periodic, naturally-occurring value in the harvest and sale of trees. Unlike other natural resources such as oil or gold, trees grow back year after year and underlying land values can appreciate in a way that is largely uncorrelated with public markets. The core value drivers of sustainable timberland investments are the responsible harvest and sale of timber and the sustainable management of the land itself.

Beyond responsibly managing timber harvests, several impact-oriented timberland investment management organizations (TIMOs) create environmental value and financial return for their investors by

monetizing their environmental impact. TIMOs (or other timber land owners) can, for example, sell conservation easements on their land to governments and conservation organizations or generate and sell carbon credits and water rights in environmental commodity markets.¹² Monetizing environmental impact allows TIMOs to generate additional short-term cash flows for their investors, mitigating some of the speculative risk inherent to investment strategies that depend on appreciating land values to generate financial return.

Farmland and Grassland

ImPact members are pursuing sustainable investments in farmland and grassland both through their legacy family assets and through new investment opportunities. In both cases, investments focus on sustainable land, crop, or livestock management in order to produce higher, healthier yields on a given piece of land. This may require converting conventionally managed land to organic or holistic crop and livestock management practices to maintain or enhance soil quality.

Converting from conventional to organic production can be a short-term challenge, sometimes resulting in periods of negative cash flows while farms are in transition. Families investing in sustainable farmland and grassland may accept this risk, though, as they anticipate improved and sustained long-term fertility from the conversion. For families who own legacy farms or ranches and do not plan to sell their land, preserving the productive capacity of their land can increase long-term revenue generation; for new investments, sustainable farmland and grassland also can generate a higher value at the point of sale.

Fisheries

Families investing with impact have the opportunity to promote sustainable fishing practices in order to revitalize shrinking seafood supplies and devastated ocean

ecosystems around the world. According to the United Nations Food and Agriculture Organization, 28.8 percent of the world's fish stocks are overfished, meaning they are being harvested at biologically unsustainable levels. 61.3 percent of fish stocks are harvested at the maximum sustainable rate.¹³ Impact-oriented business models can increase severely distressed fish stocks, protect marine habitats, and prevent further declines in ocean biomass.¹⁴ Although sustainable fishery investments are relatively new and often considered high-risk, several large foundations, including Bloomberg Philanthropies and the Rockefeller Foundation, are making impact investments in sustainable fisheries; their investments have generated growing interest among smaller family foundations.¹⁵

Impact and Financial Return Considerations of Real Asset Impact Investments

The need for impact investments in real assets is great: to date, deforestation and forest degradation account for nearly 20 percent of global greenhouse gas emissions;¹⁶ buildings account for 40 percent of global energy consumption and 30 percent of CO2 emissions;¹⁷ and 70 percent of the world's grasslands have been degraded.¹⁸ The tremendous need for more responsible management of global resources creates opportunities for families to have tangible, measurable impact through their real asset investments. The green construction market, for example, is predicted to save 23.5 billion kilowatt hours of energy from 2015-2018. LEED construction alone is poised to reduce annual greenhouse gas emissions equivalent to the amount emitted by 1.8 million cars in that time.¹⁹ Private timberlands in the United States account for 70 percent or more of forest carbon sequestration annually.²⁰



Several well-developed standards systems offer clear methodologies for designing, managing, and measuring impact within specific real asset categories. Some of those standards systems include:

- Leadership in Energy and Environmental Design (LEED): LEED is a rating system developed by the United States Green Building Council to evaluate the environmental impact and performance of a given building. To date, 14.4 billion total commercial square feet are LEED-certified around the world.
- Building Research Establishment Environmental Assessment Methodology (BREEAM): BREEAM is a UK-based sustainability assessment method for buildings. It rates the sustainability and environmental impact of buildings across nine categories and is currently used across 70 countries worldwide.
- Global Real Estate Sustainability Benchmark (GRESB): GRESB assesses the environmental, social, and governance performance of real assets globally,

Impact investing in the natural environment can ensure responsible management and stewardship of natural resources, improved ecological health, and the sustainable enhancement of ecosystems in which assets exist.



In environmental commodity markets, investors buy and sell the right to use natural resources, creating financial incentives for conservation.

including real estate portfolios and infrastructure assets. More than 200 members, of which about 60 are pension funds and their fiduciaries, use the GRESB data in their investment management and engagement process.

- Forest Stewardship Council Certification (FSC Certification): The FSC certification ensures products come from responsibly managed forests that provide environmental, social and economic benefits.
- United States Department of Agriculture (USDA) Organic Certification: The USDA certifies agricultural goods that meet production standards for preservation of the environment and avoidance of synthetic materials. Over 25,000 farmers, ranchers, and other businesses benefit from the certification and participate in the \$35 billion USA organic retail market. Other countries and regions have similar certification programs, such as the European Union's organic farming certification.

In certain real asset categories, impact and financial returns can align. Sustainable real asset management can produce higher asset values through cost savings, risk mitigation, and improved product quality. According to a 2015 study, green buildings earned higher residential sale, office sale, and rental price by 17 percent, 26 percent, and 12 percent, respectively, above their conventional counterparts.²¹ Sustainable farmland management can help lower investment risk by improving soil fertility and water retention, which improve resilience to both drought and extreme precipitation.²² Impact farmland investors may also see greater crop yield and crop quality as result of restoring degraded farmland.

In the natural environment, measured environmental value of real assets is now being monetized through the creation of environmental commodity markets such as carbon credits, mitigation banking, water rights, fish quotas, and others (see Appendix A for more information). In environmental commodity markets, investors buy and sell the right to use natural resources, creating financial incentives for conservation.

In some cases, investing for impact may limit the financial returns of a real asset investment, either through increased operating costs or constrained exit opportunities. According to a December 2014 report, the financial returns on investments in affordable housing and community real estate are typically lower than returns on upscale real estate.²³ Green buildings can be more expensive to build than conventional buildings. In the natural environment, converting farmland to organic production or other sustainable methodologies can increase operational expenditures and constrain short-term revenue generation. Natural ecosystems within sustainable timberland investments may take time and money to fully rehabilitate.

The financial and impact returns that real asset investments generate may ultimately depend on the intentions of the investor. Impact investors in real assets who aim to achieve market-rate returns have largely been able to do so. Other investors prioritize their impact objectives and intentionally seek concessionary financial returns. According to a November 2014 report published by NatureVest, impact investments in the natural environment across several different types of assets (e.g. sustainable food and fiber, habitat conservation) met the financial return expectations of their investors in every case. Many impact investors in the survey explicitly intended below-market rate returns, and that is what they received; those private investors (e.g. fund managers

and corporations) that aimed at, or above, market-rate financial returns also achieved their goals.²⁴

Going Forward

Several trends may drive the growth in real asset impact investment opportunities:

Increasing urbanization in the developing world will continue to drive a growing demand for affordable housing.

The exponential growth in urban dwellers over the coming decades, particularly in the developing world, will need to be met with affordable housing. In 2014, 54 percent of the world's population resided in urban areas. By 2050, 66 percent is projected to be urban. Continuing population growth combined with the growing trend in urbanization is projected to add 2.5 billion people to the world's urban population in the next 25 years, with nearly 90 percent of the increase concentrated in Asia and Africa.²⁵

Resource scarcity will drive demand for efficient housing and community buildings.

Building housing and community resources, particularly for developing countries' middle-income populations, will require immense consumption of materials in a construction sector that exhibits ever-increasing resource scarcity.²⁶ The demand for steel, for example, is expected to rise 80 percent between 2010 and 2030, primarily driven by growth in China, India, and other emerging markets.²⁷ Global cement production will be similarly strained by an estimated demand increase of between 43 percent and 72 percent by 2050.²⁸

Global demand for food will continue to rise.

Population growth, changing diets, and climate change will strain global food production and distribution systems in the coming decades. Roughly 795 million people remain undernourished globally. Despite significant efforts made in reducing hunger worldwide over the past two

decades, population growth has, and will continue to, challenge the capability to eliminate hunger.²⁹

Consumer demand for organic and grass fed products continues to grow.

Conscious consumers around the world are driving demand for organic, grass-fed, GMO-free, and other sustainable agricultural products. In the United States alone, the sale of organic products jumped from \$11 billion in 2004 to an estimated \$35.1 billion in 2013, according to the United States department of Agriculture's latest figures.³⁰ Across the European Union, the total organic retail market doubled from €11.1 billion in 2005 to €24 billion in 2014.³¹

Environmental commodity markets are growing.

Investors will find growing opportunities to earn financial returns on conservation efforts through environmental commodity markets. The share of greenhouse gas emissions covered by carbon pricing has tripled since 2005; the combined value of regional, national, and sub-national carbon pricing instruments was estimated by the World Bank to be just under \$50 billion in 2015.³² Pledges and investments from both public and private sector actors in REDD+ amounted to nearly \$10 billion between 2006 and 2014 with an average growth of \$796 million annually.³³ Wetland mitigation banking alone is over a \$3 billion industry and growing each year.³⁴

APPENDIX A

Environmental Impact Commodities



The sale of environmental commodities can improve financial returns on real asset impact investments.

Environmental commodities monetize conservation by creating marketplaces for buying and selling the rights to consume natural resources. These commodities monetize the environmental impact created through the management of certain real assets. The sale of environmental commodities can improve financial returns on real asset impact investments. While this is a relatively new area for investment, some ImPact member families are investing in conservation through the sale of environmental commodities.

Carbon Credits

Carbon credits are generated by greenhouse gas emission reduction programs that result in demonstrable reductions in emissions. Carbon credits can be generated by reducing consumption of fossil fuels with renewable energy (e.g. wind farms) or through improved energy efficiencies (e.g. green buildings), or by capturing and storing carbon in trees and other plants (e.g. timberland). Carbon credits can then be sold to companies that emit greenhouse gasses above a government, or voluntary, greenhouse gas emission limit. As of August 31, 2015, 39 national and 23 subnational jurisdictions are putting a price on carbon through cap-and-trade systems or taxation with a total annual market of just under \$50 billion.³⁵

Mitigation Banking

Mitigation banking is a financing mechanism for the establishment, enhancement, or restoration of natural resources in order to compensate for comparable negative impact to a nearby natural resource.³⁶ An impact-oriented landowner, for example, may enhance a damaged habitat on their land and sell the mitigation credits to a real estate developer nearby. Through the creation and sale of these credits, the impact investor

can generate financial value from the conservation of their land.

Water Rights

Owners of water rights, i.e. the right to use water from a particular source, can sell surplus water allocations to buyers who face water deficits and are willing to pay to meet their water demand. Private investment in this space is still very new and has demonstrated mixed success in returns on investment.

Fishery Quotas

Investments in sustainable fisheries can include the purchase, holding, and sale of fishing quotas, also known as individual transferable quotas. Governments regulate fishing through species-specific total allowable catch (TAC), usually for a given time period and by weight. Sustainable investors are beginning to purchase large numbers of these quotas in order to sell some of them back to artisanal fishermen who catch fewer, higher quality fish; investors can also purchase and hold a portion of the quotas to reduce the amount of fishing in a certain area until the stock of fish has been revitalized. This type of commodity is a relatively new mechanism for sustainable investment and not yet common among family offices and foundations.

REDD+ Funds

REDD+ funds support efforts to reduce emissions by limiting deforestation and degradation and encouraging conservation. REDD+ funds distribute payments to developing countries to finance initiatives for sustainable forest use. Like many of the other environmental commodities listed here, this is not yet a common investment vehicle for family offices, but is a growing space with future potential for environmental impact and financial returns.

APPENDIX B

Example Investments

VITAL CAPITAL FUND

ASSET CLASS	SECTOR	GEOGRAPHY	IMPACT STRATEGY	RETURN PROFILE
Public Equity	Education	Sub-Saharan Africa	Product-Based	Market-Rate
Fixed Income	Environmental Conservation	Middle East & North Africa	People-Based	Concessionary
Private Equity	Sustainable Consumer Products	Central & South America	Place-Based	Off-Market
Venture Capital	Housing & Community Development	Asia & Oceania	Process-Based	
Real Assets	Agriculture & Food	Eastern Europe & Russia	Behavior-Based	
Hedge Funds	Energy & Resource Efficiency	Western Europe	Model-Based	
Social Impact Bonds	Safety & Security	USA & Canada	ESG-Screened	
Cash	Healthcare & Wellness	Emerging Markets	SRI-Screened	
	Access to Finance	Developed Markets		
	Employment & Empowerment	Global		
	Base of Pyramid Services			
	Sustainable Infrastructure			
	Diversified			

Vital Capital Fund is a private equity fund that invests in opportunities to enhance the quality of life for communities in developing nations, primarily in Sub-Saharan Africa. Vital invests in infrastructure with a focus on urban, large-scale, community-integrated housing concepts and fully integrated agro-industrial solutions. Vital has a strong emphasis on education and healthcare throughout its investment projects.

ECOTRUST FOREST FUND

ASSET CLASS	SECTOR	GEOGRAPHY	IMPACT STRATEGY	RETURN PROFILE
Public Equity	Education	Sub-Saharan Africa	Product-Based	Market-Rate
Fixed Income	Environmental Conservation	Middle East & North Africa	People-Based	Concessionary
Private Equity	Sustainable Consumer Products	Central & South America	Place-Based	Off-Market
Venture Capital	Housing & Community Development	Asia & Oceania	Process-Based	
Real Assets	Agriculture & Food	Eastern Europe & Russia	Behavior-Based	
Hedge Funds	Energy & Resource Efficiency	Western Europe	Model-Based	
Social Impact Bonds	Safety & Security	USA & Canada	ESG-Screened	
Cash	Healthcare & Wellness	Emerging Markets	SRI-Screened	
	Access to Finance	Developed Markets		
	Employment & Empowerment	Global		
	Base of Pyramid Services			
	Sustainable Infrastructure			
	Diversified			

Ecotrust Forest Fund is a TIMO that manages timberland in the Pacific Northwest of the United States. Ecotrust's management strategy aims to produce high-quality timber while significantly improving forest health, salmon habitat, carbon storage, recreation, and benefits to local communities.

ALTHELIA ECOSPHERE

ASSET CLASS	SECTOR	GEOGRAPHY	IMPACT STRATEGY	RETURN PROFILE
Public Equity	Education	Sub-Saharan Africa	Product-Based	Market-Rate
Fixed Income	Environmental Conservation	Middle East & North Africa	People-Based	Concessionary
Private Equity	Sustainable Consumer Products	Central & South America	Place-Based	Off-Market
Venture Capital	Housing & Community Development	Asia & Oceania	Process-Based	
Real Assets	Agriculture & Food	Eastern Europe & Russia	Behavior-Based	
Hedge Funds	Energy & Resource Efficiency	Western Europe	Model-Based	
Social Impact Bonds	Safety & Security	USA & Canada	ESG-Screened	
Cash	Healthcare & Wellness	Emerging Markets	SRI-Screened	
	Access to Finance	Developed Markets		
	Employment & Empowerment	Global		
	Base of Pyramid Services			
	Sustainable Infrastructure			
	Diversified			

Althelia Ecosphere, a London-based investment manager, invests in sustainable land use activities that generate real assets alongside environmental commodities. Althelia invests internationally from Sub-Saharan Africa to South America, and their investments include REDD+ projects, sustainable land use, and timberland.

DIRT CAPITAL PARTNERS

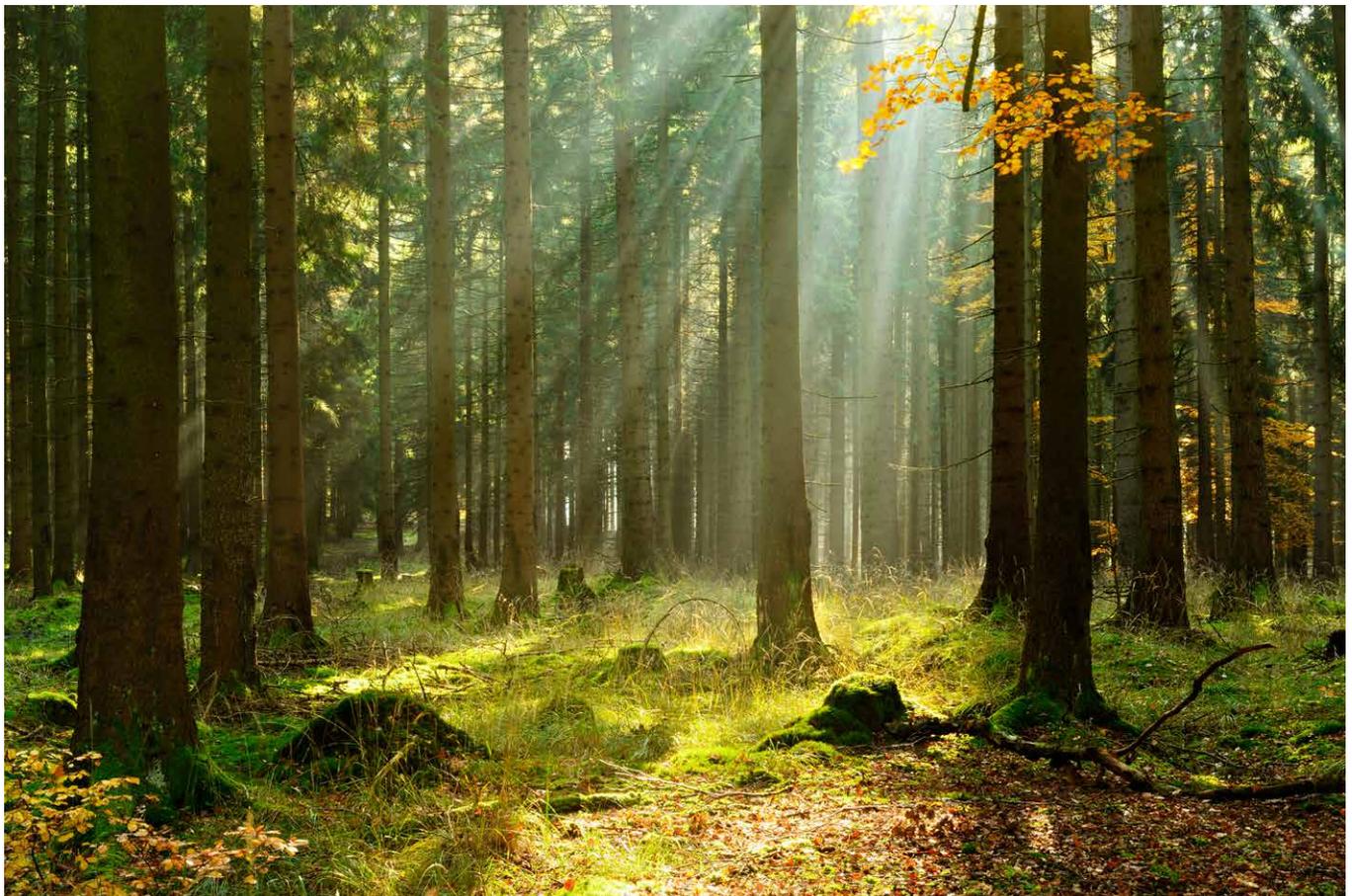
ASSET CLASS	SECTOR	GEOGRAPHY	IMPACT STRATEGY	RETURN PROFILE
Public Equity	Education	Sub-Saharan Africa	Product-Based	Market-Rate
Fixed Income	Environmental Conservation	Middle East & North Africa	People-Based	Concessionary
Private Equity	Sustainable Consumer Products	Central & South America	Place-Based	Off-Market
Venture Capital	Housing & Community Development	Asia & Oceania	Process-Based	
Real Assets	Agriculture & Food	Eastern Europe & Russia	Behavior-Based	
Hedge Funds	Energy & Resource Efficiency	Western Europe	Model-Based	
Social Impact Bonds	Safety & Security	USA & Canada	ESG-Screened	
Cash	Healthcare & Wellness	Emerging Markets	SRI-Screened	
	Access to Finance	Developed Markets		
	Employment & Empowerment	Global		
	Base of Pyramid Services			
	Sustainable Infrastructure			
	Diversified			

Dirt Capital Partners invests in farmland in partnership with farmers who have sustainable farming practices throughout the Northeast United States. Through these partnership investments, Dirt Capital Partners promotes land access and security for farmers, while keeping farmland in productive use. Dirt Capital Partners and its partner farmers agree to contractual agreements that provide the farmer with land security, autonomy, and an option to purchase the farm in the future. Each agreement is tailored to each specific farm and its farmer.

TOWN PARTNERS

ASSET CLASS	SECTOR	GEOGRAPHY	IMPACT STRATEGY	RETURN PROFILE
Public Equity	Education	Sub-Saharan Africa	Product-Based	Market-Rate
Fixed Income	Environmental Conservation	Middle East & North Africa	People-Based	Concessionary
Private Equity	Sustainable Consumer Products	Central & South America	Place-Based	Off-Market
Venture Capital		Asia & Oceania	Process-Based	
Real Assets	Housing & Community Development	Eastern Europe & Russia	Behavior-Based	
Hedge Funds	Agriculture & Food	Western Europe	Model-Based	
Social Impact Bonds	Energy & Resource Efficiency	USA & Canada	ESG-Screened	
Cash	Safety & Security	Emerging Markets	SRI-Screened	
	Healthcare & Wellness	Developed Markets		
	Access to Finance	Global		
	Employment & Empowerment			
	Base of Pyramid Services			
	Sustainable Infrastructure			
	Diversified			

Town Partners is a real estate investment company focused on multi-family, retail, and light manufacturing development opportunities in emerging neighborhoods throughout the city of Detroit. Town Partners develops mixed-use commercial real estate with a focus on job creation and shrinking supply chains for small-scale manufacturing. Town seeks to apply its real estate development model to cities around the world in an effort to grow and enhance local communities through job creation and shrinking supply chains.



APPENDIX C

Glossary

Carbon credits: A tradable certificate representing the right to emit one ton of carbon dioxide or the comparable mass of another greenhouse gas.

Easements: The right to use the real property of another owner for a specific purpose. In the context of real asset investments, this often refers to the sale of conservation easements on a piece of land that preserve the natural state of that land in perpetuity. The title to the underlying land is retained by the original owner for all other purposes.

Forest Stewardship Council certification: Ensures that products come from responsibly managed forests that provide environmental, social, and economic benefits.

LEED: Leadership in Energy and Environmental Design (LEED) is a third-party certification granted by the United States Green Business Council. The certification requirements include, but are not limited to, building design and construction, interior design and construction, building operations and maintenance, and neighborhood development. The exact requirements to

receive certification differs by type of project (e.g. existing buildings, new buildings, single-family homes, etc.) and LEED offers tiered certification: silver, gold, or platinum.

Liquidity: The measure that shows how quickly an investment can be bought or sold with little or no impact on price. Cash is the most liquid asset followed by publicly traded stocks and bonds. Real assets are less liquid than publicly traded assets because they are harder to sell.

Long-term capital gains: The gain from an investment owned for more than one year and then sold. The capital gain (or loss) is the difference between the sale value and the purchase value.

Negative cash flows: Negative cash flow occurs when a company is spending more than it is earning at a particular point in time.

Ocean biomass: The collective mass of all living organisms in a given area or ecosystem at a given time.

Real assets: Physical assets such as land, buildings, or precious metals.

REIT: Real Estate Investment Trusts (REITs) are publicly-traded companies that own and/or operate income-producing real estate.

Risk: The chance that an investment's financial return will be different than what was expected. Risk includes the possibility of losing some or all of the value of the original investment.

TIMO: Timberland Investment Management Organization. A TIMO finds, analyzes, acquires, and actively manages timberland investment properties for investors.

Volatility: A statistical measure that refers to the amount of uncertainty or risk about the size of changes in an investment's value. A lower volatility, for example, means that the value of a security does not fluctuate dramatically, but changes at a steady pace over a period of time.

Water rights: The right to use water from a particular source. In the context of real asset impact investing, a landowner can sell surplus water allocations to a buyer who faces a water deficit and is willing to pay to meet their water demand.



Endnotes

- ¹ According to the 2014 report “Investing in Conservation” by NatureVest and EKO Asset Management Partners, impact investors in real assets show that impact investment strategies “actually lower the risk profile of the underlying investment...[for example] as the fertility and water retention capacity of soil improves, land becomes more productive and valuable, as well as more resilient to drought and extreme precipitation events.” To read more, see here: http://www.naturevesttnc.org/pdf/InvestingInConservation_Report.pdf
- For more on the risk reduction of sustainable farmland investments, see: https://www.tiaa.org/public/pdf/C26304_2015_Farmland_Report.pdf.
- ² To learn more about BREEAM, see: <http://www.breeam.com/>. Note: there are several other benchmarks and certifications, such as Energy Star, a U.S. Environmental Protection Agency energy-benchmarking tool that targets simple, cost-effective strategies for improving energy efficiency in buildings.
- ³ “The Business Case for Energy Efficiency,” *Energy Star*. <https://www.energystar.gov/buildings/about-us/how-can-we-help-you/build-energy-program/business-case>. Accessed, April 21, 2016.
- “Leed Buildings Outperform Market Peers According to Research,” *USGBC*. <http://www.usgbc.org/articles/leed-buildings-outperform-market-peers-according-research>. Accessed, April 21, 2016.
- “CoStar Study Finds Energy Star, LEED Buildings, Outperform Peers,” *CoStar*. <http://www.costar.com/News/Article/CoStar-Study-Finds-Energy-Star-LEED-Bldgs-Outperform-Peers/99818>. Accessed, April 21, 2016.
- ⁴ “The State of Food Insecurity,” *Food and Agriculture Organization of the United Nations*, 2015. <http://www.fao.org/3/a4ef2d16-70a7-460a-a9ac-2a65a533269a/i4646e.pdf>. Accessed, April 21, 2016.
- ⁵ “Energy Darwinism II,” *Citi GPS: Global Perspectives & Solutions*. August 2015. <https://ir.citi.com/E8%2B83ZXr1vd%2Fqyim0DizLrUxw2FvuAQ2jOlmkGzr4ffw4YJCK8s0q2W58AkV%2FypGoKD74zHfji8%3D>. Accessed, April 21, 2016.
- ⁶ For more information about urban population growth, read the UNFPA report here: <http://www.unfpa.org/urbanization>. Accessed on May 5, 2016.
- ⁷ To read more about Vital Capital’s investment in Kora Housing, visit: <http://www.vital-capital.com/kora-housing/>
- ⁸ To read more about the USA and French tax incentives for investing in affordable housing, see: <http://www.theguardian.com/housing-network/2013/dec/09/lessons-abroad-affordable-housing-tax-breaks>
- ⁹ Sustainalytics Thematic Research, “Sector Report: Real Estate,” September 2015.
- ¹⁰ At the United Nations Conference on Climate Change in 2016, COP21, 188 countries agreed to serious greenhouse gas emission reductions plans. President Obama committed on behalf of the United States to reduce greenhouse gas emissions by 26 to 28 percent by 2025. The real estate industry, as one of the largest single emitters of greenhouse gasses, will need to make drastic changes if the United States, and every other country around the world is going to reach its goal.
- ¹¹ Ibid.
- ¹² To learn more about the Forest Stewardship Council certification, visit: <https://us.fsc.org/en-us/what-we-do/mission-and-vision>
- ¹³ Food and Agriculture Organization of the United Nations, “The State of the World Fisheries and Aquaculture,” 2014. <http://www.fao.org/3/a-i3720e.pdf>. Page 37.
- ¹⁴ Encourage Capital, “Investing for Sustainable Global Fisheries.” 2016. http://encouragecapital.com/wp-content/uploads/2016/01/Executive_Summary_FINAL_1-11-16.pdf
- ¹⁵ To read more about Bloomberg Philanthropies’ and The Rockefeller Foundation’s work in promoting sustainable fisheries, see here: <https://www.rockefellerfoundation.org/our-work/initiatives/oceans-fisheries/> and <http://www.bloomberg.org/blog/investing-in-sustainable-global-fisheries-going-from-theory-to-practice/>
- ¹⁶ UN REDD+ <http://www.un-redd.org/AboutREDD/tabid/102614/Default.aspx>

- ¹⁷ Sustainalytics Thematic Research, “Sector Report: Real Estate,” September 2015.
- ¹⁸ To read more about grassland holistic management, see: <http://savory.global/>.
- ¹⁹ Ibid.
- ²⁰ “The Potential of U.S. Forest Soils to Sequester Carbon and Mitigate the Greenhouse Effect,” (2003, latest data available).
- ²¹ AllianzGI Global Solutions, “ESG in Real Estate,” 2015.
- ²² To learn more, read “Investing in Conservation.” http://www.naturevesttnc.org/pdf/InvestingInConservation_Report.pdf
- ²³ Stephanie Petrick, “Impact investing in real estate,” December 2014.
- ²⁴ To read the full report, visit: https://www.jpmorganchase.com/corporate/Corporate-Responsibility/document/InvestingInConservation_Report_r2.pdf
- ²⁵ United Nations, “World Urbanization Prospects,” 2014. <http://esa.un.org/unpd/wup/Publications/Files/WUP2014-Highlights.pdf>. Accessed May 5, 2016.
- ²⁶ For more information, see: http://www.unep.org/sbci/pdfs/greening_the_supply_chain_report.pdf.
- ²⁷ McKinsey & Company, “Scarcity and Saturation,” 2013.
- ²⁸ WBCSD/IEA “Cement Technology Roadmap,” 2009. <https://www.iea.org/publications/freepublications/publication/Cement.pdf>. Accessed May 5, 2016.
- ²⁹ Food and Agriculture Organization of the United Nations
- ³⁰ United States Department of Agriculture Economic Research Service, <http://www.ers.usda.gov/data-products/chart-gallery/detail.aspx?chartId=35003>. Accessed May 5, 2016.
- ³¹ IFOAM EU Group. “Organic in Europe: Prospects and Developments” http://www.ifoam-eu.org/sites/default/files/ifoameu_organic_in_europe_2016.pdf. Accessed May 5, 2016.
- ³² To read more, see: http://www-wds.worldbank.org/external/default/WDSCContentServer/WDSP/IB/2015/09/21/090224b0830f0f31/2_0/Rendered/PDF/State0and0trends0of0carbon0pricing02015.pdf.
- ³³ To learn more, see: <http://www.cgdev.org/sites/default/files/CGD-Norman-Nakhoda-Climate-Forests-5-REDD-Finance.pdf>.
- ³⁴ This is the market size figure as of 2013. To read more, see: <http://www.ecosystemmarketplace.com/articles/banking-on-change-rethinking-wetland-br-mitigation-in-the-state-of-new-york/>.
- ³⁵ The World Bank Group
- ³⁶ USA Government guidelines on mitigation can be found here: <https://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol34/pdf/CFR-2012-title40-vol34-sec1508-20.pdf>

Acknowledgments

The ImPact would like to thank the following individuals for their generous contributions:

Lead Authors: Ariella Rotenberg and Sam Bonsey

With support from The ImPact Board Members:

Abigail Noble, The ImPact

Josh Cohen, Tyden Ventures

Tom Groos, Tyden Ventures

Liesel Pritzker Simmons , Blue Haven Initiative

Justin Rockefeller, Rockefeller Brothers Fund

The ImPact would like to thank those who offered content and editorial input:

Larry Band, Independent Advisor

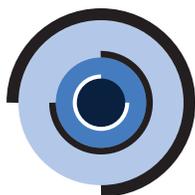
Adam Borod, RWN Management

Jacob Israelow, Dirt Capital Partners

Jason Scott, Encourage Capital

Real Assets and Impact Investing is the fourth in our 2016 series of ImPact Asset Class Primers.

These primers build off of *Impact Investing: Frameworks for Families*, released in January, 2016.



THE IMPACT

TheImPact.org